



EUROPEAN COMMISSION
DG Competition

***Case M.8440 - DUPONT / FMC (HEALTH AND
NUTRITION BUSINESS)***

Only the English text is available and authentic.

**REGULATION (EC) No 139/2004
MERGER PROCEDURE**

Article 6(1)(b) in conjunction with Art 6(2)
Date: 27/07/2017

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Brussels, 27.7.2017
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In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

To the notifying party

Subject: Case M.8440 - DuPont/FMC (Health and Nutrition Business)
Commission decision pursuant to Article 6(1)(b) in conjunction with Article 6(2) of Council Regulation No 139/2004¹ and Article 57 of the Agreement on the European Economic Area²

Dear Sir or Madam,

- (1) On 7 June 2017, the European Commission (the 'Commission') received a notification of a proposed concentration pursuant to Article 4 of the Merger Regulation by which the undertaking E. I. du Pont de Nemours and Company ('DuPont' or the 'Notifying Party', USA), acquires within the meaning of Article 3(1)(b) of the Merger Regulation sole control over the Health and Nutrition ('H&N') business of FMC Corporation ('FMC', USA) comprising food texturants and pharmaceutical excipients (but excluding FMC's Omega-3 business) (the 'Transaction')³. DuPont and FMC are collectively referred to as the 'Parties'. The undertaking resulting from the Transaction is referred to as the 'merged entity'.
- (2) By decision of 27 March 2017, adopted in application of Article 8(2) of the Merger Regulation, the Commission declared the notified concentration between The Dow Chemical Company ('Dow') and DuPont within the meaning of Article 3(1)(a) of the Merger Regulation compatible with the internal market and

¹ OJ L 24, 29.1.2004, p. 1 (the 'Merger Regulation'). With effect from 1 December 2009, the Treaty on the Functioning of the European Union ('TFEU') has introduced certain changes, such as the replacement of 'Community' by 'Union' and 'common market' by 'internal market'. The terminology of the TFEU will be used throughout this decision.

² OJ L 1, 3.1.1994, p. 3 (the 'EEA Agreement').

³ Publication in the Official Journal of the European Union No C 189, 15.6.2017, p. 52.

the EEA Agreement (Case M.7932 Dow/DuPont)⁴, subject to full compliance with the commitments annexed to that decision ('the Commitments'). The entity formed following the merger between Dow and DuPont is referred to as 'DowDuPont'.

- (3) The Transaction is part of an asset purchase and sale agreement, entered into between DuPont and FMC, pursuant to the Commitments.

1. THE PARTIES

- (4) **FMC** is a US-headquartered global specialty chemicals company with interests in agricultural, industrial and consumer markets. FMC's H&N business consists of three broad product areas – Nutritional Ingredients, Health Excipients, and Functional Health Ingredients. The acquisition includes research and development activities related to the H&N business but excludes FMC's Omega-3 business.
- (5) **DuPont** is a diversified chemicals company headquartered in the US. It is the ultimate parent company of the DuPont group. DuPont's Nutrition and Health business manufactures and supplies products specifically designed to improve the safety, nutritional quality, texture, and shelf-life of food and beverage products, pharmaceuticals, and dietary supplements.
- (6) **Dow** is a diversified chemicals company headquartered in the US. It is the ultimate parent company of the Dow group. Dow has a more limited presence in the area of Nutrition and Health.

2. THE CONCENTRATION

- (7) On 31 March 2017, DuPont and FMC entered into an asset purchase and sale agreement that provides for the acquisition by FMC of certain DuPont activities, pursuant to the Commitments. Following the merger between Dow and DuPont, the combined DowDuPont will acquire sole control over FMC's H&N business. The Transaction therefore constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

3. UNION DIMENSION

- (8) The Transaction does not have a Union dimension within the meaning of Article 1 of the Merger Regulation as it does not meet the thresholds of Article 1(2) or Article 1(3) of that regulation.
- (9) However, on 18 April 2017, the Parties informed the Commission by means of a reasoned submission that the concentration would be notifiable in [...] and would fulfil a number of further criteria for its referral to the Commission. According to the Parties, the referral to the Commission would avoid multiple national filings, thereby increasing administrative efficiency. Moreover, the affected markets are worldwide or at least EEA-wide in scope. On that basis, under Article 4(5) of the Merger Regulation, the Parties requested the Commission to examine the

⁴ Commission Decision of 27 March 2017 in case No M.7932 – *Dow/DuPont*.

Transaction. None of the Member States competent to examine the Transaction under the respective national laws expressed their disagreement within 15 working days of receiving the reasoned submission.

- (10) Therefore, the concentration is deemed to have a Union dimension pursuant to Article 4(5) of the Merger Regulation.

4. COMPETITIVE ASSESSMENT

4.1. Introduction

- (11) The Parties manufacture and supply certain specialty hydrocolloids. Specialty hydrocolloids are additives that react with water to form gels, pastes and emulsions. Specialty hydrocolloids include substances such as alginates, carrageenan, pectin and cellulose derivatives, as well as basic food ingredients such as gelatine and starch. Dow does not produce or sell alginates. Accordingly in the competitive assessment the Commission will only refer to DuPont as Dow does not have any activities in alginates.

4.2. Alginates

4.2.1. Activities of the Parties

- (12) FMC and DuPont manufacture and supply alginates. Alginates are natural hydrocolloids (water-soluble biopolymers) extracted from various brown seaweeds. Alginates occur naturally in seaweed mainly in the form of calcium, magnesium and sodium salts. Seaweed is harvested, washed, dried and ground, following which alginates are extracted through a process of neutralization. The primary benefit of hydrocolloids is their moisture-absorption qualities, and they are often used to promote thickening, gelling, texture stabilization and film formation.
- (13) Alginates are used in a wide variety of applications including food, pharmaceutical preparations (active pharmaceutical ingredient for anti-reflux suspensions, and as excipients for pharmaceutical products), industrial, textile, dentistry and other applications.
- (14) FMC manufactures and supplies alginates from a production site in Norway. FMC's alginates are sold under the *PROTANAL*®, *PROTACID*®, *MANUCOL*® and *KELCOLOID*® brands. FMC's alginates are sold for use in pharmaceutical preparations, both as an active pharmaceutical ingredient ('API') and as an excipient⁵ for pharmaceuticals (e.g. anti-reflux (API) suspensions, wound care, and controlled release applications, etc.). FMC's alginates are also sold for use in food applications and some industrial applications other than in the pharmaceutical industry.
- (15) DuPont manufactures and supplies alginates from a production site in Landerneau (France). DuPont's alginates are sold under the *GRINDSTED*® Alginate brand. DuPont's alginates are sold for use in food applications and for use as an

⁵ Excipients are inactive ingredients of a pharmaceutical product that do not increase or affect the therapeutic action of the active pharmaceutical ingredient.

excipient in pharmaceuticals (but not as an API). As mentioned, Dow does not produce or sell alginates.

4.2.2. Relevant Product Market

4.2.2.1. The Commission's practice

- (16) The Commission has not previously assessed the specialty hydrocolloids sector with regard to alginates in any detail and has thus not yet defined the relevant product market in that manufacturing sector.

4.2.2.2. The Notifying Party's views

- (17) The Notifying Party considers that within the specialty hydrocolloids sector the relevant product market is alginates. Citing a previous decision from the UK's Office of Fair Trading ('OFT'),⁶ the Notifying Party also suggests that, for the purposes of reviewing the Transaction, the narrowest possible segments of overlap under which the alginates subsector can be assessed are alginates for use in food applications and alginates for use as excipients in pharmaceuticals.
- (18) However, the Notifying Party argues that the relevant product market consists of all alginates because alginates used in food and excipient applications are the same; they are produced using the same raw materials, equipment and processes. The only difference is that alginates used as excipients require somewhat more oversight to ensure that viscosity, and microbe-levels are kept at the requisite level.
- (19) According to the Notifying Party, alginates for food and excipient applications are generally not susceptible to microbial contamination and the additional oversight is merely a function of having an employee with the appropriate expertise doing so. Moreover, the Notifying Party argues that there are no regulatory requirements for the manufacture or sale of alginates for food and pharmaceutical excipients in the EEA. According to DuPont, the Landerneau plant has been manufacturing alginates for both applications since the 1990s without any regulatory certificates (including GMP⁷ and CEP⁸), which they obtained in November 2014 (GMP) and September 2015 (CEP).⁹
- (20) With regard to alginates for use in API applications, the Notifying Party also argues that they require unique raw materials, specialized manufacturing, and different regulatory approvals as compared to alginates for food and pharmaceutical excipients.

4.2.2.3. The Commission's assessment

- (21) The Commission has investigated whether a segmentation of the alginates market by application would be appropriate. In the present case, the market investigation focused on the markets for the applications in which the Parties were active, i.e.

⁶ OFT decision of August 7, 2008, ME/3688/08 – FMC corporation / ISP holdings (U.K.) Limited, paras. 8-18.

⁷ GMP stands for Good Manufacturing Practices.

⁸ CEP stands for certificate of suitability to the monographs of the European Pharmacopoeia.

⁹ Reply to RFI 4, Annexes DuPont RFI 4.3 and 4.4. Notifying Party's submission pertaining to alginates for use as an excipient of 7 July 2017, paras. 1-7.

alginates for use in food applications and alginates for use in pharmaceutical preparations, in particular, API and excipients.

- (22) The market investigation, contrary to the Notifying Party's claim, has indicated that alginates used for different applications have different characteristics and prices and there is no demand-side substitutability between alginates for use in API, pharmaceutical excipient and food applications.¹⁰

(a) *Alginates for use in API applications*

- (23) As regards demand-side substitutability, the investigation confirmed that none of the customers that responded considers alginates for use in API as substitutable by alginates used for other applications¹¹ or by other specialty hydrocolloids.¹² A competitor indicated that there are quality and price differences.¹³ This was confirmed by customers that stated: “[...] *there is a distinction between a functional excipient (how Perrigo leverages this material) and an API application*”;¹⁴ “*API applications and Pharmaceutical Excipients are usually more expensive than food applications due to characteristics and higher quality/documentation requirements*”¹⁵ and “*Alginate classified as API [...] the price will be higher than a food grade due to the control required.*”¹⁶
- (24) With regard to supply-side substitutability, the investigation confirmed that alginates for use in API applications are produced using a particular raw material, a seaweed called laminaria hyperborea (stem).¹⁷
- (25) The manufacturing of these alginates also requires specific equipment and regulatory approvals. During the market investigation, a customer stated that: “*Alginate classified as API needs to come from a cGMP¹⁸ facility and the supplier needs to hold a CEP.*”¹⁹ A competitor indicated that: “*API quality and regulatory constraints are different from Food*”²⁰ and “[p]roduction process is specific to API and must respect specific requirements and regulation. Pharmaceutical

¹⁰ Q1A – Questionnaire to customers - alginates, question 4; Q1B – Questionnaire to competitors - alginates, question 4; Q2A – Questionnaire to customers – API alginates, question 4; Q2B – Questionnaire to competitors – API alginates, question 4.

¹¹ Q2A – Questionnaire to customers – API alginates, question 5.

¹² Q2A – Questionnaire to customers – API alginates, question 6.

¹³ Q2B – Questionnaire to competitors – API alginates, question 5.

¹⁴ Q1A – Questionnaire to customers - alginates, question 4.1.

¹⁵ Q2A – Questionnaire to customers – API alginates, question 7.

¹⁶ Q2A – Questionnaire to customers – API alginates, question 7.

¹⁷ Q1B – Questionnaire to competitors - alginates, question 5.1: “*Raw material being commonly used for API application is called Laminaria Hyperborea.*” Notifying Party's submission pertaining to alginates for use as an excipient of 7 July 2017, para. 14.

¹⁸ GMP or Good Manufacturing Practices. Commission Directive 2003/94/EC, of 8 October 2003, lays down the principles and guidelines of good manufacturing practice (GMP) in respect of medicinal products for human use and investigational medicinal products for human use. The general obligation to comply with the GMP stems from the Directive 2001/83/EC.¹⁸ According to the second paragraph of Article 46(f) of Directive 2001/83/EC (OJ L 311, 28.11.2001, p. 67), the manufacturing authorisation holder is required to ensure that the excipients are suitable for use in medicinal products by ascertaining what the appropriate good manufacturing practice (GMP) is.

¹⁹ CEP or Certificate of Suitability to the monographs of the European Pharmacopoeia. Q2A – Questionnaire to customers – API alginates, question 7.

²⁰ Q1B – Questionnaire to competitors - alginates, question 8.

production requires indeed specific equipment, processes, approvals & expertise.”²¹

(b) Alginates for use in food applications and as pharmaceutical excipients

- (26) As regard demand-side substitutability, the large majority of the respondents indicated that they have not purchased alginates for use in food applications or other specialty hydrocolloids to replace alginates for use as pharmaceutical excipients.²² Customers in the market investigations stated that: “[...] [T]he material received from a food grade manufacturer may not meet the specifications necessary to include in pharmaceutical formulations”;²³ “[w]hile food-grades complies to EC regulations E400-E404 the pharma qualities complies to Europ. Pharmacop.²⁴ (EP) [...]. Thus basket of analytics and guarantees are different [...]”;²⁵ “There would be significant cost and reformulation activities involved and changes in registration and product dossier.”²⁶
- (27) Moreover, some customers also indicated that there are price differences between these products: “[p]harm grades are more expensive & tested to different specifications”;²⁷ and that “[...] [a]lginates for pharma excipients are 20-30% more expensive due to pharma compliance requirements and the need for extensive validation.”²⁸
- (28) Furthermore, based on the available data relating to customers’ purchases, the Commission finds that none of the respondents to the market investigation purchases alginates for use as pharmaceutical excipients from non-EEA suppliers to manufacture products sold in the EEA.²⁹
- (29) Additionally, the Commission’s review of DuPont’s and FMC’s internal documents indicates that both companies look at these products separately and [...] for specific uses. See for example, the internal document of DuPont referenced below which separately identifies applications for [...] and [...].

[...]

Source: Annex DuPont RFI 10.1.36 [...]

²¹ Q1B – Questionnaire to competitors - alginates, question 5.1.

²² Q1A – Questionnaire to customers - alginates, questions 4, 5 and 7. Q1B – Questionnaire to competitors - alginates, question 4.

²³ Q1A – Questionnaire to customers - alginates, question 8.

²⁴ The European Pharmacopoeia is a single reference work for the quality control of medicines in the signatory states of the Convention on its elaboration. The official standards published within provide a legal and scientific basis for quality control during the development, production and marketing processes. European Union Directives 2001/82/EC, 2001/83/EC, and 2003/63/EC, as amended, on medicines for human and veterinary use maintain the mandatory character of European Pharmacopoeia monographs when requesting marketing authorisations (source: <https://www.edqm.eu/en/european-pharmacopoeia-background-50.html>).

²⁵ Q1A – Questionnaire to customers - alginates, question 8.

²⁶ Q1A – Questionnaire to customers - alginates, question 6.2.

²⁷ Q1A – Questionnaire to customers - alginates, question 8.

²⁸ Q1A – Questionnaire to customers - alginates, question 8.

²⁹ Q1A – Questionnaire to customers - alginates, question 12.

- (30) With regard to supply-side substitutability, the majority of the respondents indicated that they cannot switch production from alginates to another specialty hydrocolloid,³⁰ but they can switch from alginates for use for food applications to alginates used as pharmaceutical excipients.³¹ However, one of the respondents stated that switching is possible “*only if all the approvals are obtained, the manufacturing process and technology allows the obtaining of the adequate product, that pharmaceutical customers have approved the product and the manufacturing facility ... [switching] requires considerable amount of effort, knowledge and investment to do so. It also requires access to the Hyperborea seaweed often "registered" as the raw material to use for such kind of application*” (emphasis added).³²
- (31) One competitor indicated that there are also differences regarding the raw material used for these applications: “*In Food, Alginates can be produced out (of) several seaweed depending on the required property. Those seaweed can be found mostly in Europe and in Chile; [...] In Pharmaceutical excipients, both Laminaria Hyperborea, laminaria Digitata and Chilean seaweed such as lessonia Nigrescens, Trabeculata can be used.*”³³ As well as with regard to quality: “*pharmaceutical grade will be sell [sic] at higher price, and also need higher quality.*”³⁴
- (32) Furthermore, based on the Parties’ internal documents, there also seem to be differences between the technology required for alginates used as pharmaceutical excipients, as APIs and for different types of food applications. In particular, [...] the attractiveness of different technologies differs depending on the application of alginates.

[...]

Source: Annex DuPont RFI 10.1.36 [...]

- (33) In the case of alginates for use in food applications, the market investigation and the internal documents of DuPont and FMC reveal the relevance of a sub-segmentation of the market into specific food segments such as dairy, bakery, confectionery, etc.³⁵ While the Notifying Party indicated that certain types of seaweed are not essential for the production of alginates used in different food applications³⁶ it also indicated that [...] types of seaweed are used for dairy products ([...]), [...] for meat products ([...]) and [...] seaweeds are used for bakery products.³⁷

³⁰ Q1B – Questionnaire to competitors - alginates, question 7.2: “*Each hydrocolloid has specific production process and raw material need. Switching from Alginates to carrageenans (seaweed extracts) would almost correspond to the entire rebuilding of the plant and technology.*”

³¹ Q1B – Questionnaire to competitors - alginates, question 6.

³² Q1B – Questionnaire to competitors - alginates, question 6.1.

³³ Q1B – Questionnaire to competitors - alginates, question 8.

³⁴ Q1B – Questionnaire to competitors - alginates, question 8.

³⁵ See, for example, Annex DuPont RFI 10.1.36 [...].

³⁶ Notifying Party’s submission pertaining to alginates for food of 7 July 2017, paras. 7-8.

³⁷ Notifying Party’s submission pertaining to alginates for use as an excipient of 7 July 2017, para. 14.

- (34) The Commission's review of DuPont's and FMC's internal documents indicated that the Parties look at alginates for food applications by type of food, such as beverage, dairy, meat and poultry.

[...]

Source: Annex DuPont RFI 10.1.36 [...]

[...]

Source: FMC's internal document RFI 10.1.5 [...]

- (35) Moreover, the Commission understands that not all suppliers are equally present in all food segments.³⁸ A customer indicated that “*we can only buy from limited suppliers who meet the food specifications and requirements from the supermarkets.*”³⁹ Another customer said: “*Companies in the industry generally buy alginates from different suppliers according to end applications.*”⁴⁰

4.2.2.4. Conclusion

- (36) In light of the market investigation and the information available to it, for the purpose of assessing the Transaction, the Commission considers that, for the purpose of the present decision, the relevant product markets are (i) alginates for use in pharmaceutical preparations and potential sub-segments: API applications and pharmaceutical excipients; and (ii) alginates for use in food applications and potential sub-segments by food type.

4.2.3. Relevant Geographic Market

4.2.3.1. The Commission's practice

- (37) As indicated above, the Commission has not previously assessed the specialty hydrocolloids sector with regard to alginates in any detail and has thus not defined the relevant geographic market in that respect.

4.2.3.2. The Notifying Party's views

- (38) The Notifying Party considers that the relevant geographic market for alginates is worldwide or at least EEA-wide because alginates are sold in powder form and their transportation costs are low ([0-5]% of the overall cost of the product), the location of the manufacturing plants is in general determined by where raw material can be sourced; the presence of a number of non-European companies based in Asia, the absence of non-tariff barriers to trade, regulatory requirements play a limited role; prices globally are homogeneous and sales are made to customers located in Europe, South America, Asia-Pacific and North America.

³⁸ Replies to RFI to customers of alginates for food application of 23 June 2017.

³⁹ Q1A – Questionnaire to customers - alginates, question 22.1.

⁴⁰ Q1A – Questionnaire to customers - alginates, question 9.1.

4.2.3.3. The Commission's assessment

- (39) The Commission's market investigation confirms some of the claims of the Notifying Party, but not the conclusion that the relevant geographic market for alginates within the specialty hydrocolloids sector is necessarily worldwide.
- (40) With regard to supply-side substitutability however, the majority of competitors (including FMC and DuPont) sell their alginates from one production plant.⁴¹ The majority of the respondents indicated that transportation costs are modest (<5%)⁴² and that alginates can be profitably imported into the EEA from other countries, such as China or Chile.⁴³
- (41) As regards demand-side substitutability, the majority of respondents indicated that there are price differences between alginates purchased from plants located in the EEA and outside the EEA.⁴⁴ According to one customer, "*Asian alginates are offered 20-30% below European producer's sales.*"⁴⁵ A competitor stated that: "*Chinese Alginates are usually sold at a much lower price. Alginate Chinese producers do not have the same environmental cost to bear as EEA producers.*"⁴⁶
- (42) Moreover, the majority of customers that responded to the market investigation indicated that they supply alginates for use in API applications, as pharmaceutical excipients and for food applications from manufacturing plants located in the EEA.⁴⁷ A competitor explained that: "*In Food, some customers can accept Chinese origin, others won't due to internal policies or customer requirement. In Pharmaceutical applications, [...] customers do not find Alginates alternatives in China.*"⁴⁸ One customer stated: "*[t]he main obstacles to importation being GMP certification and Pharma grades*"⁴⁹ while another customer indicated: "*We can't import because we use in food applications and the retailers insist on EU sourcing and traceability*"⁵⁰ and also "*China is a relevant country, however I do not buy for EEA from China currently. Main obstacle is quality control.*"⁵¹ Finally a customer pointed out that one of the main difficulties to import alginates from outside the EEA is "*finding suppliers that offer alginate with the physical*

41 Q1B – Questionnaire to competitors - alginates, question 9; Form CO, paras. 6.4 and 6.10; Q2B – Questionnaire to competitors – API alginates, question 6.

42 Q1A – Questionnaire to customers - alginates, questions 13 and 14; Q1B – Questionnaire to competitors - alginates, question 12; Q2A – Questionnaire to customers – API alginates, question 11; Q2B – Questionnaire to competitors – API alginates, question 9.

43 Q1A – Questionnaire to customers - alginates, question 12; Q1B – Questionnaire to competitors - alginates, question 11; Q2B – Questionnaire to competitors – API alginates, question 8.

44 Q1A – Questionnaire to customers - alginates, question 15; Q1B – Questionnaire to competitors - alginates, question 14; Q2A – Questionnaire to customers – API alginates, question 12; Q2B – Questionnaire to competitors – API alginates, question 10.

45 Q1A – Questionnaire to customers - alginates, question 15.1.

46 Q1B – Questionnaire to competitors - alginates, question 14.1.

47 Q1A – Questionnaire to customers - alginates, questions 10 and 11; Q2A – Questionnaire to customers – API alginates, question 9.

48 Q1B – Questionnaire to competitors - alginates, question 11.1.

49 Q1A – Questionnaire to customers - alginates, question 12.1.

50 Q1A – Questionnaire to customers - alginates, question 12.1.

51 Q2A – Questionnaire to customers – API alginates, question 10.1.

*properties/specifications required by the customers for their end applications as this ability is linked to the strength of the suppliers' internal R&D and patents.”*⁵²

4.2.3.4. Conclusion

- (43) In light of the market investigation and the information available to it, for the purpose of assessing the Transaction, the Commission considers that the relevant geographic market is the EEA.

4.2.4. *Competitive Assessment of Alginates*

- (44) Under Article 2(2) and (3) of the Merger Regulation, the Commission must assess whether a proposed concentration would significantly impede effective competition in the internal market or in a substantial part of it, in particular as a result of the creation or strengthening of a dominant position.
- (45) The Horizontal Merger Guidelines⁵³ distinguish between two main ways in which mergers between actual or potential competitors on the same relevant market may significantly impede effective competition, namely non-coordinated and coordinated effects.
- (46) The Commission considers that the assessment of the compatibility of the Transaction with the internal market should focus on non-coordinated horizontal effects in the market with respect to the relevant products including i) alginates used as pharmaceutical excipients and (ii) alginates used for food applications, where DuPont's and FMC's activities overlap, leading to an affected market.

4.2.4.1. Alginates used as pharmaceutical excipients

(a) *Overview of the market and market shares*

- (47) According to the market investigation, the market for alginates used as pharmaceutical excipients is a concentrated market with a limited number of players active in the EEA. The Notifying Party indicated that besides FMC and DuPont, the other companies that are active in the market for alginates used as pharmaceutical excipients are Kimica and Algaia. Other companies such as Bright Moon have also been mentioned by the Notifying Party as exercising competitive pressure in the market.⁵⁴ According to the Notifying Party, in 2016 the volume of alginates for use as a pharmaceutical excipient was approximately [...] MT⁵⁵ in the EEA and [...] MT worldwide; which represents sales of approximately USD [...] million in the EEA and USD [...] million worldwide.
- (48) FMC is the main supplier of alginates for pharmaceutical excipients in the EEA and worldwide; DuPont is number two.

⁵² Q1A – Questionnaire to customers - alginates, question 12.1.

⁵³ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings (OJ C 31, 5.2.2004), paragraph 27 ('Horizontal Merger Guidelines').

⁵⁴ Notifying Party's submission pertaining to alginates for use as an excipient of 7 July 2017, paras. 8-12.

⁵⁵ MT stands for metric tonnes.

- (49) Kimica Corporation (“Kimica”) is a Japanese company active in the production and sale of alginates and its derivatives. Kimica has manufacturing plants in Japan and in Chile, which produce the full spectrum of alginate products. Kimica sells alginates for use as pharmaceutical excipients, and for food applications as well as for cosmetics, textile and animal feed applications.
- (50) Algaia is a French company specialized in the manufacturing, R&D, marketing, sales and distribution of specialty marine ingredients derived from seaweed. Following the acquisition of Cargill’s plant, Algaia has a manufacturing plant located in Lannilis (France). Algaia sells alginates for food and pet food applications, for personal care, supplements and medical devices and for non-food applications such as textile.
- (51) Qingdao Bright Moon Seaweed Group (“Bright Moon”) is a Chinese company specialised in seaweed processing, including alginates, and functional sugar alcohol, marine biological product, biomedical materials, sea cosmetics, and sea functional foodstuff. Bright Moon sells alginates for food applications and for use as pharmaceutical excipients, among other applications.
- (52) According to DuPont’s and FMC’s estimates, FMC has an estimated market share of [80-90]% (volume) and [80-90]% (value) in the EEA, and [80-90]% (volume) and [80-90]% (value) worldwide. DuPont is the number two supplier with an estimated market share of [5-10]% (volume) and [5-10]% (value) in the EEA, and [5-10]% (volume) and [5-10]% (value) worldwide. The market shares are set out in Table 1 and Table 2 based on the Parties’ estimates.

Table 1 – Alginates for use as pharmaceutical excipients – EEA estimated shares (2016)

| Suppliers | EEA – 2016 | | | |
|-------------------------|--------------|------------------|---------------------|------------------|
| | Volume (MT) | Market share (%) | Value (million USD) | Market share (%) |
| FMC | [...] | [80-90] | [...] | [80-90] |
| DuPont | [...] | [5-10] | [...] | [5-10] |
| <i>Parties combined</i> | <i>[...]</i> | <i>[80-90]</i> | <i>[...]</i> | <i>[80-90]</i> |
| Kimica | [...] | [5-10] | [...] | [5-10] |
| Algaia | [...] | [5-10] | [...] | [5-10] |
| Total | [...] | 100 | [...] | 100 |

Source: DuPont’s and FMC’s estimates

Table 2 – Alginates for use as pharmaceutical excipients – Worldwide estimated shares (2016)

| Suppliers | Worldwide – 2016 | | | |
|-------------------------|------------------|------------------|---------------------|------------------|
| | Volume (MT) | Market share (%) | Value (million USD) | Market share (%) |
| FMC | [...] | [80-90] | [...] | [80-90] |
| DuPont | [...] | [5-10] | [...] | [5-10] |
| <i>Parties combined</i> | <i>[...]</i> | <i>[80-90]</i> | <i>[...]</i> | <i>[80-90]</i> |
| Kimica | [...] | [5-10] | [...] | [5-10] |
| Algaia | [...] | [5-10] | [...] | [5-10] |
| Total | [...] | 100 | [...] | 100 |

Source: DuPont's and FMC's estimates

(b) *The Notifying Party's views*

- (53) According to the Notifying Party, the Transaction does not give rise to serious doubts as to its compatibility with the internal market in relation to alginates for use as pharmaceutical excipients, either at the EEA-level or at a worldwide level. The views of the Notifying Party can be summarised as set out below.
- (54) First, the Notifying Party argues that FMC and DuPont are not close competitors.⁵⁶ DuPont's alginates are sold mainly for food applications and, to a *de minimis* extent, pharmaceutical excipient applications. DuPont's minimal activities in respect of alginates for excipients are barely if at all perceptible to FMC.
- (55) Second, according to the Notifying Party, the merged entity will continue to face significant competition from significant global producers of alginates, including Bright Moon, Kimica, Algaia, Gather Great Ocean, Jie Jing (China), and others. DuPont argues that any food alginate producer can start supplying alginates used as excipients without substantial difficulties.⁵⁷
- (56) Third, customers of alginates often source from multiple suppliers. Switching between suppliers is possible due to the overall homogeneity of alginates.⁵⁸
- (57) Fourth, the Notifying Party argues that there are no regulatory requirements for the manufacture or sale of alginates for food and excipients in the EEA.
- (58) Last, the Notifying Party claims that there is excess global capacity in the market for alginates.⁵⁹

(c) *Concerns raised during the market investigation*

- (59) During the market investigation several respondents have expressed concerns with regard to the Transaction and its impact in alginates for use as pharmaceutical excipients.

⁵⁶ Form CO, paras. 6.170-6.174.

⁵⁷ Form CO, paras. 6.183-6.184.

⁵⁸ Form CO, para. 6.185.

⁵⁹ Form CO, para. 6.186.

(60) All competitors that responded to the market investigation indicated that the Transaction would have a negative impact.⁶⁰ A competitor stated that “[...] customers were now considering DuPont as a credible alternative to FMC since the plant was approved for this application end of 2014;”⁶¹ and also “FMC is a strong leader in the production of alginates. However, in the recent years DuPont came to challenge FMC’s dominance in these markets. As a result, a merger between these two companies would create a dominant player.”⁶² Another competitor argued that “[t]he acquisition (sic) should have more power in the market.”⁶³

(61) While the majority of customers indicated that the Transaction would not have a competitive impact with regard to alginates for use as pharmaceutical excipients,⁶⁴ some customers indicated that the Transaction would have a negative impact because “There is only a very limited number of suppliers on the market who could potentially meet the pharmaceutical grade”,⁶⁵ and as a result of the Transaction “the factory of DuPont in Landerneau will close down.”⁶⁶ Other customers stated that “[...] [the] amount of vendors will be reduced. [...] we expect a slimmed portfolio (because of synergy-effects). [...] the market position in case of volume and share will be more dominant (sic)” (emphasis added);⁶⁷ “[...] comparable operations do have a negative impact on the market, in terms of price. Security of the supply also depends upon the continuation of having access to the different production facilities of FMC or DuPont” (emphasis added).⁶⁸

(d) *Commission’s assessment: Alginates for use as pharmaceutical excipients*

(62) For the reasons set out below, the Commission considers that the Transaction raises serious doubts as to its compatibility with the internal market and with the functioning of the EEA Agreement with respect to the relevant market for alginates for use as pharmaceutical excipients in the EEA, in particular by strengthening the existing dominant position of FMC, due to its non-coordinated effects.

(i) FMC has a dominant position

(63) The Commission considers that FMC has a dominant position in the market of alginates for use as pharmaceutical excipients. On the basis of 2016 data, FMC holds more than [80-90]% market share by revenue and volume both in the EEA and worldwide. The Commission has found that the data for 2014 and 2015⁶⁹ show that FMC's market share by revenue and volume both in the EEA and worldwide was consistently above [60-70]%. The Horizontal Merger Guidelines

⁶⁰ Q1A – Questionnaire to customers - alginates, question 38.

⁶¹ Q1B – Questionnaire to competitors - alginates, question 33.1.

⁶² Agreed non-confidential minutes of a call with a competitor, 31 May 2017, para. 24.

⁶³ Q1B – Questionnaire to competitors - alginates, question 33.1.

⁶⁴ Q1B – Questionnaire to competitors - alginates, question 33.

⁶⁵ Agreed non-confidential minutes of a call with a competitor, 6 June 2017, para. 18Q1A – Questionnaire to customers - alginates, question 38.1.

⁶⁶ Q2A – Questionnaire to customers – API alginates, question 30.1.

⁶⁷ Q1A – Questionnaire to customers - alginates, question 38.1.

⁶⁸ Q1A – Questionnaire to customers - alginates, question 38.1.

⁶⁹ Form CO, para. 7.3.

state that according to well-established case-law, very large market shares - 50% or more - may per se be evidence of the existence of a dominant market position.⁷⁰ The case-law has confirmed that although the importance of market shares may vary from one market to another, very large shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position.⁷¹

(64) Therefore, the Commission considers that FMC holds a dominant position in the market for alginates for use as pharmaceutical excipients. The Commission moreover finds that the Transaction would strengthen the dominant position of FMC. Any business combination with a competing supplier of alginates for use as pharmaceutical excipients such as DuPont would by definition only strengthen FMC's dominance.

(ii) DuPont is an important alternative to FMC and the Parties are close competitors

(65) DuPont is a plausible and relatively important alternative to FMC as a supplier of alginates for use as pharmaceutical excipients. DuPont has a market share close to 10% (volume) in the EEA, which is almost double the market share that the Parties indicated for any of the other competitors. According to the market investigation, the market shares of the Parties could be higher and the competitive pressure from other players could be more limited than what the Parties estimated. Customers that responded to the market investigation identified only FMC and DuPont as suppliers of alginates for use as pharmaceutical excipients for products sold in the EEA.⁷² A customer indicated that “[s]everal market player[s] still demand material from European source.”⁷³ One customer identified Bright Moon as a supplier of alginates for this application but not for products sold in the EEA.⁷⁴ Additionally, a competitor indicated that it has sales of alginates for use as pharmaceutical excipients in the EEA.⁷⁵ Therefore, the Parties could be the only competitors active in this market in the EEA.

(66) Moreover, during the market investigation, the majority of competitors indicated that FMC and DuPont were close competitors in the market of alginates for use as pharmaceutical excipients.⁷⁶ A competitor stated that “customers were now considering DuPont as a credible alternative to FMC [...]”⁷⁷; and that “[...] in the recent years DuPont came to challenge FMC's dominance in these markets.”⁷⁸ The same competitor also said: “FMC [has] over 80% market shares in pharmaceutical excipient applications [...]. DuPont [...] has obtained pharmaceutical regulatory approvals. The only other competitor we know about

⁷⁰ Horizontal Merger Guidelines, recital 17.

⁷¹ Judgment of 14 December 2005, *General Electric v Commission*, T-210/01, ECR, EU:T:2005:456, paragraph 115.

⁷² Q1A – Questionnaire to customers - alginates, question 16.

⁷³ Q1A – Questionnaire to customers - alginates, question 21.1.

⁷⁴ Q1A – Questionnaire to customers - alginates, question 16.

⁷⁵ Q1B – Questionnaire to competitors - alginates, question 15.

⁷⁶ Q1B – Questionnaire to competitors - alginates, question 17.

⁷⁷ Q1B – Questionnaire to competitors - alginates, question 33.1.

⁷⁸ Agreed non-confidential minutes of a call with a competitor, 31 May 2017, para. 24.

[...] is Kimica [...].”⁷⁹ Another competitor stated that “*They are the major players in the market.*”⁸⁰

- (67) With regard to customers, two customers identified the Parties as close competitors, while four indicated that they were not.⁸¹
- (68) The Commission concludes that DuPont is an important alternative to FMC as a supplier of alginates for use as pharmaceutical excipients in the EEA and the Parties are each other's close competitors.

(iii) Customers have limited possibilities of switching suppliers

- (69) The Commission understands from the market investigation that customers have limited possibilities of switching suppliers. The majority of customers indicated that they would not switch suppliers in case of a price increase of 5 to 10%.⁸² According to the market investigation, two competitors reported the loss of alginate customers to a different supplier; however, none of the customers that responded to the market investigation have reported switching suppliers of alginates for use as pharmaceutical excipients in the last five years.⁸³ A customer stated that “*The cost of validating and qualifying another source will potentially exceed a 5-10% price improvement*”;⁸⁴ another said “*Quality of supply performance more important.*”⁸⁵
- (70) Switching to a new supplier requires its qualification.⁸⁶ A customer indicated that it would take “*[s]ix to twelve months to qualify a new excipient supplier, and depending on the countries of the final market to be approved, a cost range or 100 to 200k€.*”⁸⁷
- (71) Moreover, contrary to the claims of the Notifying Party, the large majority of customers do not multisource alginates for this application.⁸⁸ Furthermore, the majority of respondents to the market investigation do not consider alginates a commodity.⁸⁹ A competitor stated that “*alginates are complex recipes and difficult to match without the right seaweed access, formulation and process know-how.*”⁹⁰ Quality is the main criteria to choose a supplier of alginates for use as pharmaceutical excipients.⁹¹
- (72) The Commission concludes that customers have limited possibilities of switching suppliers of alginates for use as pharmaceutical excipients.

79 Q1B – Questionnaire to competitors - alginates, question 17.1.

80 Q1B – Questionnaire to competitors - alginates, question 17.1.

81 Q1A – Questionnaire to customers - alginates, question 21.

82 Q1A – Questionnaire to customers - alginates, question 26.

83 Q1A – Questionnaire to customers - alginates, question 28.

84 Q1A – Questionnaire to customers - alginates, question 26.1.

85 Q1A – Questionnaire to customers - alginates, question 26.1.

86 Q1A – Questionnaire to customers - alginates, question 36.

87 Q1A – Questionnaire to customers - alginates, question 36.1.

88 Q1A – Questionnaire to customers - alginates, question 23.

89 Q1A – Questionnaire to customers - alginates, question 25; Q1B – Questionnaire to competitors - alginates, question 20.

90 Q1B – Questionnaire to competitors - alginates, question 20.1.

91 Q1A – Questionnaire to customers - alginates, question 18.

(iv) There are relevant barriers to entry

- (73) As regards entry of new competitors, in January 2017, Algaia completed the acquisition of Cargill Alginate business.⁹² However, based on the market investigation, Algaia does not appear to be active in the market of alginates for use as pharmaceutical excipients. The Notifying Party claims that there is an increasing competitive pressure engendered by Asian (in particular Chinese) competitors in alginates for this application.⁹³ The market investigation indicated that one Chinese company would consider or have previously considered entering the market of alginates for use as pharmaceutical excipients.⁹⁴ However, the majority of competitors indicated that the main barrier to enter the alginate market for use as pharmaceutical excipients was regulatory requirements.⁹⁵ During the market investigation, customers also indicated that suppliers of alginates for use as pharmaceutical excipients need to go through regulatory approvals.⁹⁶ The Commission confirmed that in the EU pharmaceutical excipients included in the European Pharmacopoeia must comply with the standards set therein.⁹⁷
- (74) The European Pharmacopoeia is a single reference work for the quality control of medicines. Its purpose is to promote public health by the provision of recognised common standards for the quality of medicines and their components. According to the European Pharmacopoeia, statements in monographs constitute mandatory requirements and a product is not of Pharmacopoeia quality unless it complies with all the requirements stated in the monograph.⁹⁸ Alginates are included in the European Pharmacopoeia.
- (75) Manufacturers of pharmaceutical excipients can apply for a certificate of suitability (“CEP”) that shows compliance of the excipient with the European Pharmacopoeia standards. Such a certificate is not a mandatory requirement to manufacture excipients; however, according to the market investigation, customers are likely to consider such a certificate to be a relevant element in selecting or discarding suppliers of alginates for use as pharmaceutical excipients for products sold in the EEA. A customer stated that “*Alginates & indeed all ingredients generally require Pharm compendial status to be considered for use in Pharm*”⁹⁹; another highlighted that “*FMC and DuPont are the only CEP holders for Sodium Alginates.*”¹⁰⁰
- (76) In addition, by virtue of Article 47 of Directive 2001/83/EC the Commission has adopted Guidelines on the formalised risk assessment for ascertaining the appropriate good manufacturing practice for excipients of medicinal products for human use. Under Article 46(f) of the same Directive the holder of the

⁹² See press release: <http://www.algaia.com/en/news/algaia-completes-the-acquisition-of-cargills-alginate-business>.

⁹³ Notifying Party’s submission pertaining to alginates for food of 7 July 2017, paras. 8-12.

⁹⁴ Q1B – Questionnaire to competitors - alginates, question 26.

⁹⁵ Q1B – Questionnaire to competitors - alginates, question 25.

⁹⁶ Q1A – Questionnaire to customers - alginates, question 36.

⁹⁷ See footnote 24 above.

⁹⁸ European Pharmacopoeia (Ph. Eur.) 9th Edition, General Statements. (<https://legemiddelverket.no/godkjenning/nls/generelle-bestemmelser/1-general-notice-ph-eur-9th-ed#1.1.-general-statements>)

⁹⁹ Q1A – Questionnaire to customers - alginates, question 5.1.

¹⁰⁰ Q1A – Questionnaire to customers - alginates, question 21.1.

manufacturing authorisation must ensure that the appropriate good manufacturing practice for excipients is applied. The Commission therefore finds that there are regulatory requirements for the manufacture of pharmaceutical excipients applicable in the EEA.

- (77) While DuPont states that the Landerneau plant had been manufacturing alginates for use as pharmaceutical excipients since the 1990s without any regulatory certificates,¹⁰¹ a competitor indicated that DuPont became a credible alternative to FMC since the plant was approved for this application in November 2014.¹⁰² Moreover, based on the market investigation, customers only seem to purchase alginates for this application for product sold in the EEA from FMC and DuPont.
- (78) The Commission concludes that there are relevant barriers to entry in the market of alginates for use as pharmaceutical excipients in the EEA.

(v) There is no countervailing buyer power

- (79) With respect to buyer power, it suffices to note that the buyer power of customers may compensate for the market power of the supplier “*if those customers have the ability to resort to credible alternative sources of supply within reasonable time.*”¹⁰³
- (80) Moreover, according to the market investigation, the large majority of customers indicated that they would not consider sponsoring the entry of a new competitor.¹⁰⁴
- (81) Accordingly, in the present case, the Commission takes the view that there is no sufficient buyer power that would offset the likely negative effects resulting from the Transaction with respect to alginates for use as pharmaceutical excipients, considering the dominant position of the merged entity in the market of alginates for use as pharmaceutical excipients with a more than [80-90]% market share, the limited number of credible alternative suppliers for the EEA market; and that customers have not reported switching suppliers of alginates for use as pharmaceutical excipients in the last five years. It follows, that the merged entity would essentially be the only significant remaining player in the market of alginates for use as pharmaceutical excipients.
- (82) The Commission concludes that there will be no sufficient buyer power to countervail the likely negative effect of the Transaction on competition.

(e) *Conclusion: Alginates used as pharmaceutical excipients*

- (83) Based on the above, the Commission considers that the Transaction raises serious doubts as to its compatibility with the internal market and with the functioning of the EEA Agreement in relation to the market for alginates for use as

¹⁰¹ Notifying Party’s submission pertaining to alginates for use as an excipient of 7 July 2017, paras. 1-7.

¹⁰² Q1B – Questionnaire to competitors - alginates, question 33.1.

¹⁰³ Judgment of 23 February 2006, *Cementbouw Handel & Industrie BV v Commission*, T-282/02, ECR, EU:T:2006:64, paragraph 230.

¹⁰⁴ Q1A – Questionnaire to customers - alginates, question 34.

pharmaceutical excipients, because it would strengthen FMC's dominant or near-monopolistic position by eliminating an important and close competitor of FMC.

4.2.4.2. Alginates used for food applications

(a) Overview of the market and market shares

- (84) It follows from the relevant market analysis that the market of alginates for use in food applications could potentially be sub-segmented by food type. In general, there are seven types of food products in which food additives are mostly used: bakery goods, beverages, confectionery, dairy products, meats and seafood, snack foods and ‘other food industry segments’, which includes several minor or hard-to-classify uses, such as processed fruits and vegetables, and salad and other dressings.¹⁰⁵ The most relevant types of food in terms of value with regard to food additives are beverages, bakery goods, dairy products and confectionery.¹⁰⁶ Alginate uses include icings and meringues, bakery batters and fillings, puddings and frozen desserts, cheeses, salad dressings, syrups and beverages (for example, as a beer foam stabilizer); however, the particular application dictates the product used.¹⁰⁷
- (85) The market investigation indicates that the level of concentration changes from one food segment to another. A DuPont [internal document] [...], Chinese suppliers are portrayed as competing in [...] alginates.¹⁰⁸ Both DuPont and FMC seem to be more relevant in ‘high quality/high value’ food applications such as dairy, bakery or frozen dessert. For example, in an internal FMC document, FMC refers to itself as [...] in food applications for alginates, whereas the Chinese are identified as [...]. DuPont and Cargill are referred to as [...].¹⁰⁹

[...]

Source: FMC's internal document [...], reply to RFI 10, Annex RFI 10.1.4 [...]

- (86) The Notifying Party indicated that besides FMC and DuPont, the following companies are also active in the market of alginates for food applications: Kimica, Algaia, Bright Moon, Gather Great Ocean and Jie Jing, as well as other companies such as Snap Natural & Alginate Products.¹¹⁰ According to the Notifying Party, in 2016 the volume of alginates used for food applications was approximately [...] MT in the EEA and [...] MT worldwide; which represents sales of approximately USD [...] million in the EEA and USD [...] million worldwide.
- (87) Shandong Jiejing Group Corporation (“Jie Jing”) is a Chinese company that produces, supplies and exports alginates, in particular sodium alginates but also

¹⁰⁵ Notifying Party's reply to RFI 2, Annex DuPont RFI 2 1.1 - The Global Market for Food Additives, August 2016, Chapter 3, p. 12.

¹⁰⁶ Notifying Party's reply to RFI 2, Annex DuPont RFI 2 1.1 - The Global Market for Food Additives, August 2016, Chapter 3, p. 13.

¹⁰⁷ Notifying Party's reply to RFI 2, Annex DuPont RFI 2 1.1 - The Global Market for Food Additives, August 2016, Chapter 3, p. 72.

¹⁰⁸ Notifying Party's reply to RFI 10, Annex DuPont RFI 10.1.36.

¹⁰⁹ Cargill is no longer active in alginates following the sale of its manufacturing plant to Algaia, which was completed in January 2017.

¹¹⁰ Form CO, para. 6.159. Notifying Party's submission pertaining to alginates for use as an excipient of 7 July 2017, paras. 8-12.

potassium alginate, and low molecular weight alginates, among others. According to its website¹¹¹ Jie Jing sells food grade sodium alginates for, *inter alia*, ice cream, yoghurt, cream, bakery products, spread applications, dairy products, salad dressings and fruit juices.

- (88) Qingdao Gather Great Ocean Algae Industry Group (“Gather Great Ocean”) is a Chinese company that produces and supplies alginates, in particular sodium alginates but also alginic acid for several applications including food.¹¹²
- (89) SNAP Natural & Alginate Products Pvt. Limited is an Indian company that manufacture salts of alginic acid, carrageenan and seaweed extract as an organic agricultural input. Their salts of alginic acid are produced from sargassum seaweed (brown algae). According to its website,¹¹³ this company sells food grade sodium and potassium alginates. They also sell alginates for other applications.
- (90) According to DuPont’s and FMC’s estimates, Kimica is the largest supplier (in volume) of alginates for food applications in the EEA and FMC and DuPont are number two and three, respectively. At worldwide level, in value FMC is the largest supplier followed by Bright Moon, and DuPont is number 4; in volume Bright Moon is the largest supplier, followed by Kimica and FMC, and DuPont is number 6. After the Transaction, the merged entity will become the largest supplier in value and volume in the EEA and worldwide with an estimated combined market share of [20-30]% (volume) and [20-30]% (value) in the EEA, and [20-30]% (volume) and [20-30]% (value) worldwide. The market shares are set out in Table 3 and Table 4 based on the Parties’ estimates.

Table 3 – Alginates for food applications – EEA estimated shares (2016)

| Suppliers | EEA – 2016 | | | |
|-------------------------|--------------|------------------|---------------------|------------------|
| | Volume (MT) | Market share (%) | Value (million USD) | Market share (%) |
| FMC | [...] | [10-20] | [...] | [10-20] |
| DuPont | [...] | [10-20] | [...] | [10-20] |
| Parties combined | [...] | [20-30] | [...] | [20-30] |
| Kimica | [...] | [10-20] | [...] | [10-20] |
| Bright Moon | [...] | [5-10] | [...] | [5-10] |
| Algaia | [...] | [5-10] | [...] | [5-10] |
| Gather Great Ocean | [...] | [5-10] | [...] | [5-10] |
| Jie Jing | [...] | [5-10] | [...] | [5-10] |
| Others ¹¹⁴ | [...] | [20-30] | [...] | [20-30] |
| Total | [...] | 100 | [...] | 100 |

Source: DuPont’s and FMC’s estimates

¹¹¹ Jie Jing’s website: www.jiejing-alginate.com.

¹¹² Gather Great Ocean’s website: en.judayang.com.

¹¹³ SNAP Natural & Alginate Products’ website: www.snapalginate.com.

¹¹⁴ Snap Natural & Alginate Products PYT. Limited, Qingdao Liyang Seaweed Industrial Co., Ltd., Qingdao Nanyang Seaweed Industrial Co., Ltd., Qingdao Yulong Algae Co., Ltd., Lianyungang Zhongda Seaweed Industrial Co. Ltd., Fengrun Seaweed Co. Ltd.

Table 4 – Alginates for food applications – Worldwide estimated shares (2016)

| Suppliers | Worldwide – 2016 | | | |
|-------------------------|------------------|------------------|---------------------|------------------|
| | Volume (MT) | Market share (%) | Value (million USD) | Market share (%) |
| FMC | [...] | [10-20] | [...] | [10-20] |
| DuPont | [...] | [5-10] | [...] | [5-10] |
| Parties combined | [...] | [20-30] | [...] | [20-30] |
| Bright Moon | [...] | [10-20] | [...] | [10-20] |
| Kimica | [...] | [10-20] | [...] | [10-20] |
| Algaia | [...] | [10-20] | [...] | [5-10] |
| Gather Great Ocean | [...] | [10-20] | [...] | [5-10] |
| Jie Jing | [...] | [5-10] | [...] | [5-10] |
| Others ¹¹⁵ | [...] | [10-20] | [...] | [20-30] |
| Total | [...] | 100 | [...] | 100 |

Source: DuPont's and FMC's estimates

- (91) With regard to companies included in the “Others” category, Snap Natural & Alginate Products was the only one identified by one customer as a supplier of alginates for food applications.¹¹⁶
- (92) The Notifying Party indicated that FMC's and DuPont's sales of alginates for food applications have [...] in the last three years.¹¹⁷ The sales of the Parties are set out in Table 5 and Table 6.

Table 5 – Alginates for food applications – FMC's and DuPont's EEA sales (2014-2016)

| Alginates for Food (EEA) | | | | | | | | | | | | |
|--------------------------|--------------|----------------|---------------------|----------------|--------------|----------------|---------------------|----------------|--------------|----------------|---------------------|----------------|
| | 2014 | | | | 2015 | | | | 2016 | | | |
| | Volume (MT) | Share (%) | Value (million USD) | Share (%) | Volume (MT) | Share (%) | Value (million USD) | Share (%) | Volume (MT) | Share (%) | Value (million USD) | Share (%) |
| FMC | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] |
| DuPont | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] |
| Parties combined | [...] | [20-30] | [...] | [30-40] | [...] | [20-30] | [...] | [30-40] | [...] | [20-30] | [...] | [20-30] |
| Total market | [...] | 100 | [...] | 100 | [...] | 100 | [...] | 100 | [...] | 100 | [...] | 100 |

Source: DuPont's and FMC's estimates

¹¹⁵ Snap Natural & Alginate Products PYT. Limited, Qingdao Liyang Seaweed Industrial Co., Ltd., Qingdao Nanyang Seaweed Industrial Co., Ltd., Qingdao Yulong Algae Co., Ltd., Lianyungang Zhongda Seaweed Industrial Co. Ltd., Fengrun Seaweed Co. Ltd.

¹¹⁶ Replies to RFI to customers of alginates for food application of 23 June 2017.

¹¹⁷ Notifying Party's submission pertaining to alginates for food of 7 July 2017, para. 3.

Table 6 – Alginates for food applications – FMC’s and DuPont’s worldwide sales (2014- 2016)

| Alginates for Food (Worldwide) | | | | | | | | | | | | |
|--------------------------------|-------------|-----------|---------------------|-----------|-------------|-----------|---------------------|-----------|-------------|-----------|---------------------|-----------|
| | 2014 | | | | 2015 | | | | 2016 | | | |
| | Volume (MT) | Share (%) | Value (million USD) | Share (%) | Volume (MT) | Share (%) | Value (million USD) | Share (%) | Volume (MT) | Share (%) | Value (million USD) | Share (%) |
| FMC | [...] | [10-20] | [...] | [20-30] | [...] | [10-20] | [...] | [20-30] | [...] | [10-20] | [...] | [10-20] |
| DuPont | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] | [...] | [10-20] | [...] | [5-10] | [...] | [5-10] |
| <i>Parties combined</i> | [...] | [20-30] | [...] | [30-40] | [...] | [30-40] | [...] | [30-40] | [...] | [20-30] | [...] | [20-30] |
| Total market | [...] | 100 | [...] | 100 | [...] | 100 | [...] | 100 | [...] | 100 | [...] | 100 |

Source: DuPont’s and FMC’s estimates

(93) Concerning different food segments, the Notifying Party provided FMC and DuPont’s sales for each relevant category.¹¹⁸ The market shares are set out in Table 7 and Table 8.

Table 7 – FMC’s and DuPont’s alginates sales by food type in the EEA (2016)

| Food types | EEA – 2016 | | | | | |
|------------------------------|-------------|---------------------|-------------|---------------------|----------------|---------------------|
| | DuPont | | FMC | | Combined sales | |
| | Volume (MT) | Value (million USD) | Volume (MT) | Value (million USD) | Volume (MT) | Value (million USD) |
| Bakery | [...] | [...] | [...] | [...] | [...] | [...] |
| Confectionery | [...] | [...] | [...] | [...] | [...] | [...] |
| Cream Fillings | [...] | [...] | [...] | [...] | [...] | [...] |
| Dairy Frozen | [...] | [...] | [...] | [...] | [...] | [...] |
| Dairy General | [...] | [...] | [...] | [...] | [...] | [...] |
| Dressings | [...] | [...] | [...] | [...] | [...] | [...] |
| Fruit Filling ¹¹⁹ | [...] | [...] | [...] | [...] | [...] | [...] |
| Fruit Prep | [...] | [...] | [...] | [...] | [...] | [...] |
| RTD Dairy Protein | [...] | [...] | [...] | [...] | [...] | [...] |
| RTD Non Protein | [...] | [...] | [...] | [...] | [...] | [...] |
| Sauces & Soups | [...] | [...] | [...] | [...] | [...] | [...] |
| Others | [...] | [...] | [...] | [...] | [...] | [...] |
| Unknown | [...] | [...] | [...] | [...] | [...] | [...] |
| Total | [...] | [...] | [...] | [...] | [...] | [...] |

¹¹⁸ Notifying Party’s reply to RFI 11, question 2.

¹¹⁹ [...].

Table 8 – FMC’s and DuPont’s alginates sales by food type worldwide (2016)

| Food types | Worldwide – 2016 | | | | | |
|------------------------------|------------------|---------------------|-------------|---------------------|----------------|---------------------|
| | DuPont | | FMC | | Combined sales | |
| | Volume (MT) | Value (million USD) | Volume (MT) | Value (million USD) | Volume (MT) | Value (million USD) |
| Bakery | [...] | [...] | [...] | [...] | [...] | [...] |
| Confectionery | [...] | [...] | [...] | [...] | [...] | [...] |
| Cream Fillings | [...] | [...] | [...] | [...] | [...] | [...] |
| Dairy Frozen | [...] | [...] | [...] | [...] | [...] | [...] |
| Dairy General | [...] | [...] | [...] | [...] | [...] | [...] |
| Dressings | [...] | [...] | [...] | [...] | [...] | [...] |
| Fruit Filling ¹²⁰ | [...] | [...] | [...] | [...] | [...] | [...] |
| Fruit Prep | [...] | [...] | [...] | [...] | [...] | [...] |
| RTD Dairy Protein | [...] | [...] | [...] | [...] | [...] | [...] |
| RTD Non Protein | [...] | [...] | [...] | [...] | [...] | [...] |
| Sauces & Soups | [...] | [...] | [...] | [...] | [...] | [...] |
| Others | [...] | [...] | [...] | [...] | [...] | [...] |
| Total | [...] | [...] | [...] | [...] | [...] | [...] |

(94) The Notifying Party estimated that FMC’s and DuPont’s combined market shares in 2016 in the food segment of bakery applications¹²¹ would be [20-30]% (volume) and [20-30]% (value) in the EEA, and [30-40]% (volume) and [40-50]% (value) worldwide; and in the food segment of dairy applications¹²² would be [5-10]% (volume) and [5-10]% (value) in the EEA, and [10-20]% (volume) and [10-20]% (value) worldwide.¹²³ The market shares for bakery applications are set out in Table 9 and Table 10; and for dairy applications in Table 11 and Table 12.

Table 9 – FMC’s and DuPont’s market shares in the food segment of bakery applications in the EEA (2016)

| Bakery Applications | EEA – 2016 | | | |
|--------------------------|------------------|------------|---------------------------|------------|
| | Total sales (MT) | Shares (%) | Total sales (million USD) | Shares (%) |
| DuPont | [...] | [10-20] | [...] | [10-20] |
| FMC | [...] | [10-20] | [...] | [10-20] |
| <i>Parties combined</i> | [...] | [20-30] | [...] | [20-30] |
| Total market size | [...] | 100 | [...] | 100 |

Source: DuPont’s estimates

¹²⁰ [...].

¹²¹ Bakery applications include cakes, pastries & sweet goods, bread & bread products, baker’s custard, bakery fillings, etc.

¹²² Dairy applications include general, frozen, cheese, dairy drinks, creams, RTD, dairy other, desserts, yoghurt, butter, milk derivatives, toppings, fermented, fresh, infant formula, etc.

¹²³ Notifying Party’s reply to RFI 12, question 3.

Table 10 – FMC’s and DuPont’s market shares in the food segment of bakery applications worldwide (2016)

| Bakery Applications | Worldwide – 2016 | | | |
|-------------------------|------------------|------------|---------------------------|------------|
| | Total sales (MT) | Shares (%) | Total sales (million USD) | Shares (%) |
| DuPont | [...] | [10-20] | [...] | [10-20] |
| FMC | [...] | [20-30] | [...] | [20-30] |
| <i>Parties combined</i> | [...] | [30-40] | [...] | [40-50] |
| Total market size | [...] | 100 | [...] | 100 |

Source: DuPont’s estimates

Table 11 – FMC’s and DuPont’s market shares in the food segment of dairy applications in the EEA (2016)

| Dairy Applications | EEA – 2016 | | | |
|-------------------------|------------------|------------|---------------------------|------------|
| | Total sales (MT) | Shares (%) | Total sales (million USD) | Shares (%) |
| DuPont | [...] | [5-10] | [...] | [0-5] |
| FMC | [...] | [0-5] | [...] | [0-5] |
| <i>Parties combined</i> | [...] | [5-10] | [...] | [5-10] |
| Total market size | [...] | 100 | [...] | 100 |

Source: DuPont’s estimates

Table 12 – FMC’s and DuPont’s market shares in the food segment of dairy applications worldwide (2016)

| Dairy Applications | Worldwide – 2016 | | | |
|-------------------------|------------------|------------|---------------------------|------------|
| | Total sales (MT) | Shares (%) | Total sales (million USD) | Shares (%) |
| DuPont | [...] | [5-10] | [...] | [5-10] |
| FMC | [...] | [5-10] | [...] | [5-10] |
| <i>Parties combined</i> | [...] | [10-20] | [...] | [10-20] |
| Total market size | [...] | 100 | [...] | 100 |

Source: DuPont’s estimates

(b) *The Notifying Party’s views*

- (95) According to the Notifying Party, the Transaction does not give rise to serious doubts as to its compatibility with the internal market in relation to alginates for food applications, either at the EEA-level or at a worldwide level. The views of the Notifying Party can be summarised as set out below.
- (96) First, the Notifying Party argues that FMC and DuPont are not close competitors.¹²⁴
- (97) Second, according to the Notifying Party, alginates for food applications is a highly competitive, nearly commoditized area in which the merged entity will continue to face significant competition from significant global producers of

¹²⁴ Form CO, paras. 6.170-6.174.

alginates for food applications, including Bright Moon, Kimica, Algaia, Gather Great Ocean, Jie Jing (China), and others.¹²⁵ The Notifying Party argues all sophisticated alginates producers (including Kimica, Bright Moon, Algaia, Gather Great Ocean, and Jie Jing) are active across all food segments. Producers of alginates for food can serve the entire spectrum of end-use applications without substantial difficulty.¹²⁶

- (98) Third, the Notifying Party indicate that DuPont's and FMC's sales are higher in non-meat applications (such as bakery or dairy) but DuPont argues that there are no material differences between the different food applications in terms of raw material, equipment or production process.¹²⁷
- (99) Fourth, customers of alginates often source from multiple suppliers. Switching between suppliers is possible due to the overall homogeneity of alginates.¹²⁸
- (100) Fifth, the Notifying Party argues that there are no regulatory requirements for the manufacture or sale of alginates for food and excipients in the EEA.
- (101) Last, the Notifying Party claims that there is excess global capacity in the market for alginates.¹²⁹

(c) *Concerns raised during the market investigation*

- (102) In responding to the market investigation several respondents have expressed concerns with regard to the Transaction and its impact in alginates for food applications.
- (103) The majority of competitors that responded to the market investigation indicated that the Transaction would have a negative impact with regard to alginates for food applications.¹³⁰ A competitor stated that “*FMC is already the No 1 player in food alginates, and the combined entity will be even more dominant.*”¹³¹ Another competitor indicated that “[*t*]he acquisition (*sic*) should have more power in the market.”¹³²
- (104) While the majority of customers indicated that the Transaction would have no impact with regard to alginates for food applications,¹³³ some customers indicated that the Transaction would have a negative impact because “*we have limited suppliers and for sure prices will increase*”¹³⁴ and adds “[*t*]he supplier base keeps reducing and it means we will have no chance to tender on the market to keep costs low.”¹³⁵

125 Form CO, paras. 6.183-6.184.

126 Notifying Party's reply to RFI 11, question 2.

127 Notifying Party's reply to RFI 11, question 2.

128 Form CO, para. 6.185.

129 Form CO, para. 6.186.

130 Q1B – Questionnaire to customers - alginates, question 34.

131 Agreed non-confidential minutes of a call with a competitor, 31 May 2017, para. 24.

132 Q1B – Questionnaire to competitors - alginates, question 34.1.

133 Q1B – Questionnaire to competitors - alginates, question 33.

134 Q1A – Questionnaire to customers - alginates, question 39.1.

135 Q1A – Questionnaire to customers - alginates, question 41.

(105) Another customer indicated that “[w]e foresee a negative impact on competition in alginates for food applications. [...] in the food business we foresee a big impact on the competitiveness after this merger. FMC has a market share of 50% in the market and DuPont 7%.”¹³⁶ A different customer stated that: “I think the factory of DuPont in Landerneau will close down. DuPont is in 2017 our main supplier of alginates so this will have an impact on food business.”¹³⁷

(d) *Commission’s assessment: Alginates for food applications*

(106) For the reasons set out below, the Commission considers that the Transaction raises serious doubts as to its compatibility with the internal market and with the functioning of the EEA Agreement with respect to alginates for food applications and potentially in non-meat applications such as bakery and dairy, because it would eliminate an important competitive constraint for FMC and entail anticompetitive non-coordinated effects.

(i) The estimated market shares of the Parties understate their relevance in the market of alginates for food applications

(107) The Commission takes the view that the market shares of FMC and DuPont in the market for alginates for food applications, as declared by the Notifying Party, are already significant and could be understated, in particular with regard to non-meat applications such as bakery and dairy.

(108) According to the market investigation, the market shares of the Parties could be higher and the competitive pressure from other players could be more limited than what the Parties estimated.

(109) Customers that responded to the market investigation identified FMC, DuPont, Algaia, Kimica and Bright Moon as suppliers of alginates for food applications.¹³⁸ Gather Great Ocean indicated sales of alginates for food applications in the EEA. One customer indicated that FMC’s market share in food applications could be as high as 50%.¹³⁹ And a competitor stated that “FMC is already the No 1 player in food alginates, and the combined entity will be even more dominant.”¹⁴⁰

(110) For specific food applications, with regard to bakery applications, the estimated market shares provided by the Notifying Party already indicate that the combined market share is [40-50]% (value). As regards dairy applications, FMC and DuPont are the only two competitors that have been consistently identified by customers as credible suppliers of alginates (6 out of 7 respondents). Algaia was also selected as a credible supplier (4 out of 7 respondents), followed by Bright Moon (3 out of 7) and Kimica (2 out of 7). Only one customer identified Gather Great Ocean and Jie Jing as credible suppliers of alginates for dairy applications and a different customer identified SNAP Natural & Alginates Products.¹⁴¹

136 Q2A – Questionnaire to customers – API alginates, questions 30.1 and 32.

137 Q2A – Questionnaire to customers – API alginates, question 30.1.

138 Q1A – Questionnaire to customers - alginates, questions 16 and 17.

139 Q2A – Questionnaire to customers – API alginates, questions 30.1 and 32.

140 Agreed non-confidential minutes of a call with a competitor, 31 May 2017, para. 24.

141 Replies to RFI to customers of alginates for food application of 23 June 2017.

(111) Therefore, several competitors identified by the Notifying Party as suppliers of alginates for food applications in the EEA do not seem to be present in the overall market for food applications or in specific segments such as bakery and dairy applications. It follows that the Parties' market shares, which are already significant and are set to increase as a result of the Transaction, are in all likelihood understated.

(ii) DuPont is an important alternative to FMC

(112) The Commission understands that DuPont is an important alternative to FMC with regard to alginates for food applications in the EEA. DuPont has a market share of close to 11% (value) and of [10-20]% (volume), which according to the Parties' estimates provides for the third most significant position in terms of both value and volume in the market of alginates for food applications. One competitor identified DuPont as one of the two European challengers of FMC's position in the market of alginates for food applications by stating to the Commission that: "*FMC is the leading player in alginates for food applications, the challengers, located in Europe, are Algaia and DuPont.*"¹⁴²

(113) Moreover, during the market investigation, the majority of respondents indicated that FMC and DuPont were close competitors in the market of alginates for food applications.¹⁴³ A customer stated that "*we can only buy from limited suppliers who meet the food specifications and requirements from the supermarkets*" (emphasis added).¹⁴⁴ A competitor stated that "*FMC and DuPont compete closely in food applications, in particular in the specialty segment.*"¹⁴⁵ Another competitor pointed out that FMC and DuPont are "*the major players in the market.*"¹⁴⁶

(114) In terms of specific food applications, the data relating to the sales of the Parties show that FMC and DuPont both have a strategic focus on non-meat applications, in particular in bakery and dairy applications and to a lesser extent in sauces and soups applications. The Notifying Party stated that [...].¹⁴⁷ An internal DuPont document [...] indicates that alginates for [...] are areas in which DuPont should [...]. Another internal document of DuPont indicates [...].¹⁴⁸

[...]

Source: DuPont's internal document [...], reply to RFI 10, Annex RFI 10.1.23 [...]

(115) The Notifying Party claims that Chinese producers have aggressively expanded their shares of sales in recent years including within the same segments as the Parties.¹⁴⁹ According to the Notifying Party, between 2016 and 2017 there has been a significant increase of imports of alginates from China into some European countries, such as France, Germany, Italy and Spain.

¹⁴² Agreed non-confidential minutes of a call with a competitor, 31 May 2017, para. 10.

¹⁴³ Q1A – Questionnaire to customers - alginates, question 22; Q1B – Questionnaire to competitors - alginates, question 18.

¹⁴⁴ Q1A – Questionnaire to customers - alginates, question 22.1.

¹⁴⁵ Agreed non-confidential minutes of a call with a competitor, 31 May 2017, paras. 10 and 24.

¹⁴⁶ Q1B – Questionnaire to competitors - alginates, question 18.1.

¹⁴⁷ Notifying Party's reply to RFI 11, question 2.

¹⁴⁸ Notifying Party's reply to RFI 10, Annex DuPont RFI 10.1.19 [...].

¹⁴⁹ Notifying Party's submission pertaining to alginates for food of 7 July 2017, paras. 4-6.

(116) However, the data provided by the Notifying Party does not show a correlation between the decrease in the Parties' sales of alginates for food applications and the increase in imports from China. In fact, in the EEA, the sales of the Parties spiked from 2014 to 2015 only to return in 2016 to sales volumes closer (but below) to those of 2014. Moreover, as regard Chinese suppliers, during the market investigation a customer stated “[w]e can’t import because we use in food applications and the retailers insist on EU sourcing and traceability.”¹⁵⁰ Also a competitor explained that “[m]any clients have concerns regarding Chinese products when it refers to Food [...]. Some customers even have internal rules banning use of Chinese ingredients after many food safety scandals in China like melamine. [...] [T]here is a growing concern relating to Chinese seaweed due to polluted seas (and therefore product) and this is problematic for food applications. Therefore, customers who are most careful about their own brand will not source alginates from China.”¹⁵¹ It follows that DuPont remains an important alternative to FMC in food alginates and that the Parties' sales in the EEA have not been significantly affected by the alleged recent expansion of Chinese producers of alginates for food applications.

(iii) Customers have limited possibilities of switching suppliers

(117) The Commission understands from the market investigation that customers have limited possibilities of switching suppliers. The majority of customers indicated that they would not switch suppliers in the case of a price increase by 5 to 10%.¹⁵² According to the market investigation, two competitors reported the loss of alginate customers to a different supplier;¹⁵³ however, the majority of customers that responded to the market investigation have not switched suppliers of alginates food applications in the last five years.¹⁵⁴ A customer stated that “[t]here is no competition and we are at the mercy of the limited suppliers in the market.”¹⁵⁵

(118) Switching to a new supplier requires its qualification.¹⁵⁶ A customer indicated that “[t]he internal qualification process can take 9-18 months. [...] There could be also an impact in terms of REACH if there is a requirement to register some of the products.” Another customer indicated that “[s]uppliers needs to be both quality approved (by assessments, certificates, audits, etc.) and commercially approved (signing of contract [...]).”¹⁵⁷ A customer stated that “Generally for our food ingredient speciality hydrocolloid products, we need to go through both regulatory approvals and a qualification process for any supplier that [customer name] uses. This can vary depending on the supplier, and the number of sites that they will be producing from and the number of sites where [customer name] will be using the products.”¹⁵⁸

150 Q1A – Questionnaire to customers - alginates, question 12.1.

151 Agreed non-confidential minutes of a call with a competitor, 31 May 2017, para. 21.

152 Q1A – Questionnaire to customers - alginates, question 27.

153 Q1B – Questionnaire to competitors - alginates, question 21.

154 Q1A – Questionnaire to customers - alginates, question 29.

155 Q1A – Questionnaire to customers - alginates, question 27.1.

156 Q1A – Questionnaire to customers - alginates, question 37.

157 Q1A – Questionnaire to customers - alginates, question 37.1.

158 Q1A – Questionnaire to customers - alginates, question 37.1.

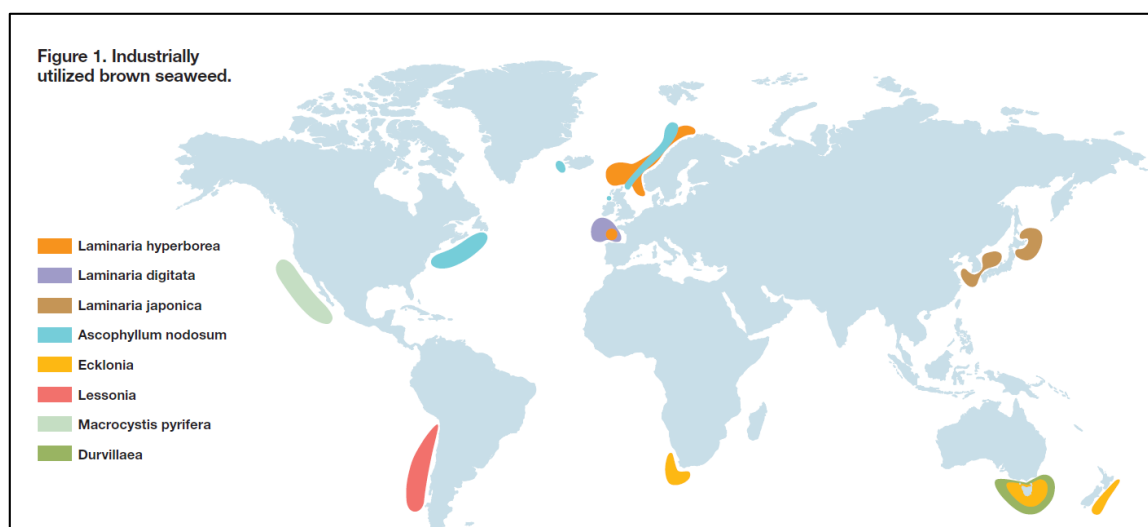
(119) Moreover, contrary to the claims of the Notifying Party, the large majority of customers do not multisource alginates for food applications.¹⁵⁹ A customer indicated that “[b]ecause of differences in functionality, it is very difficult to use alginates from different suppliers for the same end use.”¹⁶⁰ Furthermore, the majority of respondents to the market investigation do not consider alginates a commodity.¹⁶¹ A customer stated that “We use alginates to make bake-stable fillings. Alginate blends are optimized for use in particular production applications; once we have reached a final formulation, we do not often change it.”¹⁶² Another customer indicated that “Alginate is a specialty product because of its contribution to the end use of our product. It must be very consistent within specifications.”¹⁶³ Quality is the main criteria to choose a supplier of alginates for food applications.¹⁶⁴ It follows that customers have limited possibilities of switching suppliers of alginates for food applications.

(iv) There are relevant barriers to entry

(120) From the market investigation and some of the Parties’ internal documents, the Commission considers that not all suppliers have direct access to all seaweed due to the limited harvesting locations. Moreover, not all types of seaweeds have the same grade and it appears that not all seaweeds are used for all food applications. A competitor indicated that “[...] for different types of food, they might seek alginates with different characteristics such as thickening or texturizing.”¹⁶⁵

[...]

Source: Notifying Party’s reply to RFI 10, Annex DuPont RFI 10.1.36 [...]



Source: FMC’s Alginates Brochure 2003
(<http://www.fmcbiopolymer.com/Portals/Pharm/Content/Docs/Alginates.pdf>)

159 Q1A – Questionnaire to customers - alginates, question 24.
160 Q1A – Questionnaire to customers - alginates, question 24.1.
161 Q1A – Questionnaire to customers - alginates, question 25; Q1B – Questionnaire to competitors - alginates, question 20.
162 Q1A – Questionnaire to customers - alginates, question 25.1.
163 Q1A – Questionnaire to customers - alginates, question 25.1.
164 Q1A – Questionnaire to customers - alginates, question 19.
165 Agreed non-confidential minutes of a call with a competitor, 31 May 2017, para. 10.

- (121) Traditionally, Chinese suppliers have manufactured alginates from locally cultivated *Laminaria (Saccharina) japonica*.¹⁶⁶ Moreover, they only have access to other seaweed through imports. In the case of FMC and DuPont, as well as Algaia and Kimica, they have direct access to the main sources of seaweed for food applications which are located in Europe and Chile. FMC and DuPont use different seaweeds for certain food applications. The specific seaweeds used by FMC and DuPont to produce alginates for food applications are outlined in Table 13 and Table 14.¹⁶⁷

Table 13 – Specific seaweeds used by FMC to produce alginates for food applications

[...]

Source: Notifying Party's reply to RFI 12, question 2

Table 14 – Specific seaweeds used by DuPont to produce alginates for food applications

[...]

Source: Notifying Party's reply to RFI 12, question 2

- (122) As regards entry of new competitors, as indicated before, in January 2017, Algaia completed the acquisition of Cargill Alginate business, which was active in the market of alginates for food applications.¹⁶⁸ The respondents to the market investigation indicated that they do not expect entries in the market of alginates in the next two years.¹⁶⁹
- (123) Contrary to the Notifying Party's view, the manufacture and sale of alginates for food is subject to regulatory requirements, in particular the general legislation applicable to the production of food, such as the general food provisions laid down by Regulation (EC) 178/2002 and the food hygiene provisions laid down by Regulation (EC) 852/2004.
- (124) In addition, the manufacture and sale of alginates for food applications need to comply with the specific legislation on food additives, namely Regulation (EC) No 1333/2008 on food additives and Commission Regulation (EU) No 231/2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008. The Commission therefore finds that there are regulatory requirements for the manufacture and sale of food alginates in the EEA.
- (125) The Commission concludes that there are relevant barriers to entry in the market of alginates for food applications in the EEA.

¹⁶⁶ Notifying Party's reply to RFI 10, Annex DuPont RFI 10.1.36 [...].

¹⁶⁷ Notifying Party's reply to RFI 12, question 2.

¹⁶⁸ See press release: <http://www.algaia.com/en/news/algaia-completes-the-acquisition-of-cargill-alginate-business>.

¹⁶⁹ Q1A – Questionnaire to customers - alginates, question 33; Q1B – Questionnaire to competitors - alginates, question 28.

(v) There is no countervailing buyer power

(126) The Commission finds that several factors such as the combined market shares of the Parties, the fact that they will become the market leader in the relevant market of alginates for food applications in the EEA and worldwide, and their significant strength in some non-meat applications such as dairy and bakery, as well as the limited number of credible alternative suppliers for the EEA market; and the fact that customers have not reported switching suppliers of alginates for use as pharmaceutical excipients in the last five years, would all indicate that because of the Transaction the Parties would face limited competitive pressure from clients. Moreover, according to the market investigation, the large majority of customers indicated that they would not consider sponsoring the entry of a new competitor.¹⁷⁰ Accordingly, the Commission takes the view that there is no sufficient buyer power with respect to the demand of alginates for food applications that could offset the likely negative non-coordinated effects resulting from the Transaction.

(e) *Conclusion: Alginates used for food applications*

(127) Based on the above, the Commission considers that the Transaction raises serious doubts as to its compatibility with the internal market and with the functioning of the EEA Agreement in relation to the market for alginates for food applications and some non-meat applications such as bakery and dairy. This is due to non-coordinated effects, in particular the elimination of an important competitive constraint in the EEA market.

4.3. Carrageenan

4.3.1. Activities of the Parties

(128) FMC and DuPont manufacture and supply carrageenan. Carrageenan is a natural hydrocolloid extracted from red seaweed. Red seaweed is harvested, dried and washed, following which it undergoes a hot extraction process to separate the carrageenan from the extraneous plant fibre. Carrageenan is supplied in two grades: refined and semi-refined. Refined carrageenan is processed either using an alcohol-precipitation method, or a gel-press method. These methods produce refined carrageenan, which has less odour, colour, and extraneous cellular material, than semi-refined carrageenan. Refined carrageenan is typically used in traditional food applications (*e.g.*, dairy products, beverages, protein drinks, salad dressings *etc.*). Semi-refined carrageenan undergoes a less intensive process, and is alkali-extracted, bleached, dried and milled into a usable powder. Semi-refined carrageenan is typically more suited for use in meat and pet food applications.

(129) FMC manufactures and supplies carrageenan from production sites in the Philippines and the USA. FMC manufactures and supplies both refined and semi-refined carrageenan. DuPont manufactures and supplies carrageenan from a production site in Chile. DuPont's carrageenan is sold under the GRINDSTED® Carrageenan brand. DuPont manufactures and supplies refined carrageenan only. Dow does not produce or sell carrageenan.

¹⁷⁰ Q1A – Questionnaire to customers - alginates, question 34.

4.3.2. Relevant Product Market

- (130) The Commission has not previously assessed the specialty hydrocolloids sector with regard to carrageenan. The Notifying Party considers that the relevant product market consists of all carrageenan; but it also assesses the Transaction under the narrowest possible segments of overlap: (i) carrageenan for food applications; and (ii) refined carrageenan.
- (131) For the purpose of this decision, the exact product market definition can be left open as the Transaction only gives rise to an affected market in the EEA in the narrow segment identified by the Notifying Party of refined carrageenan for food applications.

4.3.3. Relevant Geographic Market

- (132) As indicated above, the Commission has not previously assessed the specialty hydrocolloids sector with regard to carrageenan. The Notifying Party considers that the relevant geographic market is at least EEA-wide, if not worldwide in scope.
- (133) For the purpose of this decision, the exact geographic market definition can be left open as the Transaction only gives rise to an affected market in the EEA in a narrow segment identified by the Notifying Party of refined carrageenan for food applications.

4.3.4. Competitive Assessment: Carrageenan

4.3.4.1. Market Shares

- (134) The Transaction only gives rise to an affected market in the EEA in a narrow segment identified by the Notifying Party of refined carrageenan for food applications, while DuPont does not supply semi-refined carrageenan.
- (135) The Notifying Party submits that in 2016 (i) FMC had a market share in refined carrageenan of [5-10]% and [10-20]% (in volume and value, respectively) in the EEA and of [10-20]% and [20-30]% (in volume and value, respectively) worldwide. (ii) DuPont had a market share of [10-20]% and [10-20]% (in volume and value, respectively) in the EEA and of [10-20]% and [10-20]% (in volume and value, respectively) worldwide.
- (136) FMC and DuPont face competition from at least five other competitors in the EEA and worldwide, this includes competitors such as Beilian (EEA: [20-30]% in volume and [20-30]% in value; and worldwide: [10-20]% in volume and [10-20]% in value); Cargill (EEA: [20-30]% in volume and [20-30]% in value; and worldwide: [10-20]% in volume and [5-10]% in value); Ceamsa (EEA: [10-20]% in volume and [5-10]% in value; and worldwide: [0-5]% in volume and [0-5]% in value); and CP Kelco (EEA: [0-5]% in volume and [0-5]% in value; and worldwide: [10-20]% in volume and [10-20]% in value).

4.3.4.2. Assessment

- (137) As indicated above, the proposed Transaction would only give rise to an affected market in the EEA in the segment of refined carrageenan for food applications. The Commission notes that the Parties' combined market share amounts to

[20-30]% in volume and [20-30]% in value in the EEA and to [20-30]% in volume and [30-40]% in value worldwide. The merged entity would continue to be challenged by two competitors with similar market shares, Beilian and Cargill as well as other competitors, such as CP Kelco and Ceamsa.

- (138) Further, the Notifying Party submits the Transaction does not give rise to serious doubts in the market of carrageenan under any product market definition given that FMC and DuPont are neither close, nor important, competitors. The Parties have different portfolios and offer non-competing goods. The majority of FMC's carrageenan sales are for dairy/non-dairy protein beverages and oral care applications, while DuPont's sales are focused on dairy, meat and confectionery food. In addition, the Parties will continue to face intense competition from several rivals, both globally and in the EEA. Finally, at present, there is considerable excess carrageenan capacity globally (FMC estimates that 2016 global capacity is approximately [...] MT/annum).

4.3.4.3. Conclusion

- (139) Therefore, in light of above, the Commission concludes that the Transaction does not raise serious doubts as to its compatibility with the internal market in respect of the narrower segment of refined carrageenan for food application or the overall carrageenan market in the EEA.

4.4. Pectin

4.4.1. *Activities of the Parties*

- (140) FMC and DuPont supply pectin. Pectin is a natural hydrocolloid used to gelatinize, stabilise and jellify products so as to alter their level of viscosity. The industrial extraction of pectin uses by-products from the fruit juice industry to produce pectin, typically apple pomace and citrus fruits.
- (141) Additionally, irrespective of the different natural sources of fruit pectin and according to the *quality* of pectin, there is low-methoxyl pectin ("LM" pectin) and high-methoxyl pectin ("HM" pectin). The degree of esterification (methoxylation) is the characteristic used to define the quality of pectin. LM pectin has a degree of esterification of less than 50 and is therefore used in certain applications such as fruit preparations and yoghurt. HM pectin has a degree of esterification of 50 or more and is therefore used in special applications such as jam.
- (142) FMC divested its pectin manufacturing plant to Cargill in 2015 and no longer manufactures pectin, however FMC purchases pectin from third parties and resells pectin to residual legacy customers. FMC resells both low- and high-methoxyl pectin extracted from citrus peel.
- (143) DuPont manufactures and supplies pectin from its facilities in Mexico, and in the Czech Republic. DuPont's pectin is sold under the GRINDSTED® Pectin brand. DuPont manufactures pectin and supplies pectin extracted from citrus fruits, and it supplies both low- and high-methoxyl pectin. Dow does not produce or sell pectin.

4.4.2. Relevant Product Market

- (144) In a previous decision,¹⁷¹ the Commission found several elements in support of a distinction between pectin and other specialty hydrocolloids, as well as further subdivisions of the pectin market into apple and citrus pectin and/or LM and HM pectin; but ultimately the product market definition was left open.
- (145) The Notifying Party considers that the relevant product market consists of all pectin and that no distinction should be drawn between pectin extracted from apple or citrus peel or between low- and high-methoxyl pectin since the resulting pectin has the same end-use applications.
- (146) For the purpose of this decision, the exact product market definition can be left open as the outcome of the competitive assessment remains the same under any alternative relevant pectin segmentation retained.

4.4.3. Relevant Geographic Market

- (147) In *Cargill / Degussa*,¹⁷² the Commission found indications that the geographic scope of the market could be limited to the EEA. The Notifying Party considers that the relevant geographic is at least EEA-wide, if not worldwide in scope.
- (148) For the purpose of this decision, the exact geographic market definition can be left open as the Parties only have a significant (above 20%) combined market share in pectin worldwide.

4.4.4. Competitive Assessment: Pectin

4.4.4.1. Market Shares

- (149) The Transaction does not give rise to an affected market in the EEA. The Parties only have a combined market share in pectin above [20-30]% worldwide.
- (150) The Notifying Party submits that in 2016 (i) FMC had a market share of [0-5]% and [0-5]% (in volume and value, respectively) worldwide. (ii) DuPont had a market share of [20-30]% and [10-20]% (in volume and value, respectively) worldwide.
- (151) FMC and DuPont face competition from at least three other competitors worldwide, including CP Kelco (worldwide: [40-50]% in volume and value); Cargill (worldwide: [10-20]% in volume and [10-20]% in value); and H&F (worldwide: [5-10]% in volume and [5-10]% in value).

4.4.4.2. Assessment

- (152) The Commission notes that the Parties' combined market share amounts to [10-20]% in volume and [10-20]% in value in the EEA and to [20-30]% in volume and [20-30]% in value worldwide. The market share increments brought by the Transaction are less than [0-5]%.

¹⁷¹ Commission decision of 29 March 2006, COMP/M.3975 – *Cargill / Degussa Food Ingredients*, recitals 75-81 (“Cargill / Degussa”).

¹⁷² M.3975 – *Cargill/Degussa*, recital 92.

- (153) The merged entity would continue to be challenged by a number of significant competitors, including CP Kelco and Cargill with higher market shares than the merged entity. Moreover, the Notifying Party submits that the Transaction does not give rise to serious doubts in the market of pectin. FMC does not manufacture pectin. In 2015, FMC sold its pectin manufacturing plant to Cargill. FMC purchases and resells small amounts of pectin to a few residual legacy pectin customers. Furthermore, the market share increments brought by the Transaction is less than [0-5] %.

4.4.4.3. Conclusion

- (154) Therefore, in light of above, the Commission concludes that the Transaction does not raise serious doubts as to its compatibility with the internal market in respect of the overall pectin market in the EEA.

4.5. Microcrystalline cellulose

4.5.1. *Activities of the Parties*

- (155) FMC and DuPont supply microcrystalline cellulose (“MCC”), also known as cellulose gel. MCC is manufactured from pure, depolymerized alpha-cellulose. The resulting cellulose gel is then dried to produce a powder. MCC is used primarily in pharmaceuticals as an excipient, i.e. a dry binder in tablets and capsules. It is also used in pharmaceutical and cosmetic liquid and cream formations as a wet or dry suspending aid, emulsion and foam stabilizer, opacifier and thickener. MCC can also be used for food applications.
- (156) FMC manufactures and supplies MCC for pharmaceutical applications as an excipient and for food applications.
- (157) DuPont does not manufacture MCC. DuPont purchases a limited amount of MCC pursuant to a partnership with Mingtai, a chemical company based in Taiwan. The vast majority of this MCC is for use in DuPont’s Systems,¹⁷³ and DuPont also resells a *de minimis* amount of MCC as a stand-alone product. DuPont resells MCC under the GRINDSTED® MCC brand. Dow does not produce or sell MCC.

4.5.2. *Relevant Product Market*

- (158) In a previous decision,¹⁷⁴ the Commission investigated calcium phosphates, in particular MCC for use as pharmaceutical excipients. The Commission found that MCC and two other pharmaceutical excipients (dicalcium phosphate or “DCP”, and precipitated calcium carbonate or “PCC”) fell within a broader market for pharmaceutical excipients.
- (159) The Notifying Party considers that the relevant product market consists of all MCC. Neither of the Parties manufacture or supply DCP or PCC.

¹⁷³ See Section 4.6.

¹⁷⁴ Commission decision of July 13, 1999, COMP/M.1517 – *Rhodia/Donau Chemie/Albright & Wilson*, para. 32.

- (160) For the purpose of this decision, the exact product market definition for MCC can be left open as the outcome of the competitive assessment remains the same under any alternative relevant product market segmentation.

4.5.3. Relevant Geographic Market

- (161) In *Rhodia/Donau*,¹⁷⁵ the Commission found that the relevant geographic market for calcium phosphates was essentially EEA-wide in scope. The Notifying Party considers that the relevant geographic market is at least EEA-wide, if not worldwide in scope.
- (162) For the purpose of this decision, the exact geographic market definition for MCC can be left open as the outcome of the competitive assessment remains the same under the alternative geographic market definitions.

4.5.4. Competitive Assessment: MCC

4.5.4.1. Market Shares

- (163) The Transaction gives rise to an affected market in the EEA in MCC.
- (164) The Notifying Party submits that in 2016 (i) FMC had a market share of [20-30]% and [20-30]% (in volume and value, respectively) in the EEA and of [30-40]% and [40-50]% (in volume and value, respectively) worldwide. (ii) DuPont had a market share of [0-5]% and [0-5]% (in volume and value, respectively) in the EEA and of [0-5]% and [0-5]% (in volume and value, respectively) worldwide.
- (165) FMC and DuPont face competition from at least four other competitors in the EEA and worldwide, including JRS (EEA: [30-40]% in volume and [30-40]% in value; and worldwide: [20-30]% in volume and [20-30]% in value); Mingtai (EEA: [10-20]% in volume and [10-20]% in value; and worldwide: [10-20]% in volume and [10-20]% in value); and Blanver (EEA: [5-10]% in volume and [5-10]% in value; and worldwide: [5-10]% in volume and [5-10]% in value).

4.5.4.2. Assessment

- (166) The Commission notes that the Parties' combined market share amounts to [20-30]% in volume and [20-30]% in value in the EEA and to [30-40]% in volume and [40-50]% in value worldwide. The market share increments brought by the Transaction are however less than [0-5]% in the EEA and worldwide. The merged entity would continue to be challenged by a number of significant competitors, including JRS, Mingtai and Blanver.
- (167) Furthermore, the Notifying Party submits that the Transaction does not give rise to serious doubts in the MCC market given that there is a lack of manufacturing overlap between FMC and DuPont and that DuPont has a *de minimis* share of sales, both globally and in the EEA.

¹⁷⁵ Commission decision of July 13, 1999, COMP/M.1517 – *Rhodia/Donau Chemie/Albright & Wilson*, para. 46.

4.5.4.3. Conclusion

- (168) Therefore, in light of above, the Commission concludes that the Transaction does not raise serious doubts as to its compatibility with the internal market in respect to the overall MCC market in the EEA.

4.6. Systems

4.6.1. *Activities of the Parties*

- (169) FMC and DuPont manufacture and supply Systems. Systems are products that consist of two or more ingredients (e.g. alginates, carrageenan, MCC, pectin, etc.) which are blended together. These products usually contain a multitude of ingredients, in different ratios, that are sold to customers as a ready-made blend or mix.
- (170) FMC manufactures Systems at its sites in Scotland (UK), Maine (USA), Cebu (Philippines), with some capabilities at its new plant in Rayong (Thailand). FMC sells Systems under the Avicel-plus, Gelstar, Nutricol, Gelcarin, Danagel, Lactogel, and Viscarin brands. FMC blends Systems used in a variety of different food applications such as general dairy; ready-to-drink dairy beverages; meat; confections; bakery; and pet food. FMC supplies alginates, carrageenan, MCC and a limited amount of pectin Systems (i.e. Systems that include these products as part of the blend).
- (171) DuPont manufactures its Systems at sites in Missouri (USA), Haderslev (Denmark), and Pirapozinho (Brazil). DuPont's Systems are sold under the CREMODAN®, GRINDSTED®, and RECODAN® brands. DuPont blends Systems for a variety of different food applications such as ice cream, sour cream, bread, cakes and recombined meat. DuPont supplies alginates, carrageenan, MCC and pectin Systems. Dow does not manufacture or sell Systems.

4.6.2. *Relevant Product Market*

- (172) The Commission has not previously assessed Systems. The Notifying Party considers that the relevant product market consists of Systems segmented by application. According to the Notifying Party, Systems are generally blended to a customer's specifications and, regardless of composition, all Systems for food have the same end-use application.
- (173) For the purpose of this decision, the exact product market definition for Systems can be left open as the Transaction only gives rise to an affected market worldwide in the segment of Systems for food applications identified by the Notifying Party.

4.6.3. *Relevant Geographic Market*

- (174) The Notifying Party considers that the relevant geographic market is worldwide.
- (175) For the purpose of this decision, the exact geographic market definition for Systems can be left open as the Transaction only gives rise to an affected market worldwide in the segment of Systems for food applications identified by the Notifying Party.

4.6.4. *Competitive Assessment: Systems*

4.6.4.1. Horizontal overlap

- (176) The Notifying Party submits that the Transaction only gives rise to an affected market worldwide in a narrow segment of Systems for food applications identified by the Notifying Party. The Notifying Party submits that DuPont's estimated market share is between [20-30]% - [30-40]%, while FMC's market share is below [0-5]% worldwide.¹⁷⁶ According to the Notifying Party, the market share increments brought by the Transaction amount to less than [0-5]%.
- (177) Furthermore, the Notifying Party submits that the Transaction does not give rise to serious doubts in a market of Systems for food applications given that there has been an increase in new entrants [...] over the last 10 years. Additionally, it also submits that barriers to entry are essentially non-existent in Systems for food applications.
- (178) In conclusion, in light of the above, the Commission concludes that the Transaction does not raise serious doubts as to its compatibility with the internal market in respect of the narrower segment of Systems for food applications.

4.6.4.2. Vertical relationships

- (179) The Transaction will create vertical links between the activities of DuPont and FMC. As described in Sections 4.2 to 4.6, FMC and DuPont are active in the upstream markets for alginates,¹⁷⁷ carrageenan,¹⁷⁸ MCC¹⁷⁹ and pectin;¹⁸⁰ and both undertakings manufacture and supply systems for food applications.¹⁸¹
- (180) Considering the market shares of FMC and DuPont in each of the upstream markets and their combined market share in the overall downstream market of System for food applications, the Notifying Party submits that the Transaction would not give rise to serious doubts due to customer or input foreclosure.
- (181) The Notifying Party submits that the Transaction would not give rise to input foreclosure. The merged entity would not have the ability or incentive to foreclose the upstream market since there will be several alternative sources of supply for each of the upstream products. The Commission notes that with regard to the upstream market of alginates, the commitments offered by the Notifying Party would eliminate a potential serious doubts regarding input foreclosure.
- (182) According to the Notifying Party, the Transaction would not give rise to customer foreclosure. The merged entity would not have the ability or incentive to foreclose customers given that Systems applications represent a modest proportion of the overall demand of the upstream products. Further, the merged entity would have a moderate market position in the downstream market of systems for food applications. The Notifying Party also submits that there are a

¹⁷⁶ Form CO, para. 6.208.

¹⁷⁷ See Section 4.2 for the assessment of the market for alginates.

¹⁷⁸ See Section 4.3 for the assessment of the market for carrageenan.

¹⁷⁹ See Section 4.5 for the assessment of the market for MCC.

¹⁸⁰ See Section 4.4 for the assessment of the market for pectin.

¹⁸¹ See Section 4.6 for the assessment of the market for systems for food applications.

large number of competitors in this downstream segment such as Tate & Lyle, Cargill, Palsgaard, Denali Ingredients, Profile Foods, TIC Gums, Dairy Ingredients, Ingredion, National Stabilizers, Crest Foods, Kerry Ingredients, Main Street Foods, and Premium Ingredients.

- (183) In conclusion, in light of above, the Commission considers that the Transaction does not raise serious doubts as to its compatibility with the internal market with respect to the vertical links between DuPont and FMC, including those derived from the Parties' activities in the upstream market of alginates.

5. REMEDIES

5.1. Framework of the assessment of the commitments

- (184) Where, as in this case, a notified concentration raises serious doubts as to its compatibility with the internal market, the parties may modify the notified concentration so as to remove the grounds for the serious doubts identified by the Commission with a view to having it declared compatible with the internal market pursuant to Article 6(1)(b) in conjunction with Article 6(2) of the Merger Regulation.
- (185) As set out in the Commission Notice on Remedies,¹⁸² commitments have to eliminate the Commission's serious doubts entirely; they have to be comprehensive and effective from all points of view.
- (186) In assessing whether or not commitments will restore effective competition, the Commission considers all relevant factors, including the type, scale and scope of the proposed commitments, with reference to the structure and the particular characteristics of the market in which the Commission has identified serious doubts as to the compatibility of the notified concentration with the internal market, including the position of the Parties and other participants on the market.¹⁸³

5.2. Commitments submitted by the Notifying Party

- (187) In order to address the serious doubts raised by the Transaction and with a view to rendering the concentration compatible with the internal market, the Parties have modified the notified concentration with the Notifying Party submitting to the Commission the proposed commitments.
- (188) The Notifying Party submitted two sets of commitments in order to address the serious doubts raised by the Transaction. The Notifying Party formally submitted remedies on 5 July 2017 ("Initial Commitments"). After the Commission gathered the views of market participants on the Initial Commitments ("market test"), and informed the Notifying Party of the remaining concerns, the Notifying Party submitted a revised remedy proposal on 18 July 2017 ("Final Commitments").

¹⁸² Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (2008/C 267/01), (the "Commission Notice on Remedies").

¹⁸³ Commission Notice on Remedies, paragraph 12.

(189) The Commission considers the Final Commitments sufficient to ensure that the Transaction no longer raises serious doubts as to its compatibility with the internal market. The Final Commitments are annexed to this decision and form an integral part of the decision.

5.3. Initial Commitments

(190) Initially, the Notifying Party proposed the following modification to the Transaction:

- (a) to divest by way of a sale to the entity approved by the Commission as acquirer of the assets listed below (the 'Purchaser'): DuPont's global alginate business, currently manufactured and sold under the GRINDSTED®*Alginate* brand at the Landerneau (France) plant (the "Divestment Business");
- (b) to include, at the option of the Purchaser, all pectin-alginates mixtures currently manufactured and blended at Landerneau and sold under the GRINDSTED® EP 0023FRX and GRINDSTED® FB Stabiliser Systems range;
- (c) to include all tangible and intangible assets for the sourcing, development, manufacturing, packaging or sale of alginates (and, at the option of the Purchaser, those relating to the pectin-alginate mixtures), including inventory, stock, personnel, pipeline products, patents, know-how, customer lists, permits and authorizations;
- (d) to include a [...] royalty-free global licence to use DuPont's GRINSTED® Alginate brand and any associated trademarks and product names, which the Purchaser could extend by a maximum of [...], upon application to the monitoring trustee; followed by a commitment not to reintroduce the licensed brand throughout the licensing period and for an additional [...] period after the termination of the licence agreement (the 'black out' period). The alginate products would be re-branded by the Purchaser during the licensing period.

(191) In addition, the Notifying Party proposed to enter into related commitments, *inter alia* regarding the separation of the divested businesses from their retained businesses, the preservation of the viability, marketability and competitiveness of the divested businesses, including the appointment of a monitoring trustee and, if necessary, a divestiture trustee.

(192) The Commission assessed the appropriateness of the Initial Commitments and carried out a market test.

5.4. The Commission's market test

(193) The Commission launched a market test of the Initial Commitments on 7 July 2017. The market test included competitors and customers of alginates and pectin worldwide.

(194) In general, there was the view that the Initial Commitments could remedy the serious doubts identified by the Commission, subject to the modification of a number of specific elements.

- (195) In particular, a majority of respondents considered that the exclusion of the pectin-alginates mixtures currently manufactured and blended at Landerneau, would negatively impact the viability of the plant.¹⁸⁴ In all other respects, competitors and customers generally considered that the Divestment Business includes all necessary assets to be able to compete effectively with the merged entity.
- (196) In addition, a majority of respondents indicated that the [...] duration of the licence to use DuPont's GRINSTED® Alginate brand, with the option of a [...] extension, may not be sufficient time for a Purchaser to re-brand the alginate products. Respondents indicated that for both food and pharmaceutical applications a longer re-branding period was necessary.¹⁸⁵
- (197) Finally, when replying to the question of who could be a suitable purchaser of the Divestment Business, respondents underlined the importance of having experience in the hydrocolloid sector.¹⁸⁶
- (198) The Initial Commitments were consequently improved by the Final Commitments submitted on 18 July 2017 in order to remedy the serious doubts identified by the Commission as to the compatibility of the Transaction with the internal market.

5.5. Final Commitments submitted by the Notifying Party

5.5.1. Description of the Final Commitments

- (199) The Notifying Party submitted the Final Commitments on 18 July 2017. The full text of the Final Commitments is attached as Annex to this Decision.
- (200) The Final Commitments have been modified vis-à-vis the Initial Commitments as described in Section 5.3 mainly as follows:
- (a) The Final Commitments establish that the pectin-alginates mixtures currently manufactured and blended at Landerneau and sold under the GRINDSTED® EP 0023FRX and GRINDSTED® FB Stabiliser Systems range are now part of the Divestment Business and its inclusion is no longer at the option of the Purchaser;
 - (b) The Final Commitments include, at the option of the Purchaser, a transitional supply agreement of pectin [...] for a duration of up to [...] between DuPont and the Purchaser. This supply agreement may be extended for [...] at the option of the Purchaser [...];
 - (c) The royalty-free global licence to use DuPont's GRINSTED® Alginate brand and any associated trademarks and product names has been extended [...] with a possibility to prolong it for up to [...], upon application by the Purchaser to the monitoring trustee. The blackout period has also been extended to up to [...] to match the full length of the re-branding period;

¹⁸⁴ Questionnaire to customers and competitors – Commitments – Market Test, question 5.

¹⁸⁵ Questionnaire to customers and competitors – Commitments – Market Test, questions 16 and 17.

¹⁸⁶ Questionnaire to customers and competitors – Commitments – Market Test, question 21.

- (d) With regard to the Purchaser, the Final Commitments indicate that in order to approve it, a Purchase should have [...], the capability to source sufficient volumes of raw materials to enable the Landerneau plant to run at full capacity [...].

5.5.2. *Assessment of the Final Commitments*

(201) The Commission considers that, in addition to removing the identified serious doubts entirely, the Final Commitments address the outstanding issues related to the viability and competitiveness of the Divestment Business:

- (a) the divestment of DuPont's global alginate business, consisting of the Landerneau plant and related assets and intangible assets, removes the overlap between FMC and DuPont with regard to alginates;
- (b) the inclusion of the pectin-alginates mixtures currently manufactured and blended at Landerneau and sold under the GRINDSTED® EP 0023FRX and GRINDSTED® FB Stabiliser Systems range, which account for [...] of the value of the entire alginate business at the Landerneau plant,¹⁸⁷ will help to ensure the viability and competitiveness of the plant;
- (c) the [...] duration of the licence, which may be extended for [...] and the black-out period, is of a sufficient duration for the re-branding of alginate products for food applications and for the re-branding of alginate for use as pharmaceutical excipients;
- (d) the [...] transitional supply agreement of pectin [...] ensures that the Purchaser, if it does not already have its own supply of pectin, is able to continue producing the pectin-alginate mixtures currently manufactured and blended at Landerneau and being transferred with the divestment Business without any disruption to the supply of this raw material essential for the pectin-alginate mixtures. The [...] period, which can be extended by [...], will allow the Purchaser to establish an alternative supply relationship;
- (e) the additional Purchaser criterion ensures that the Purchaser will have the necessary expertise and capability to ensure that the Divestment Business is maintained and developed as a viable and competitive force in the alginates market.

5.5.3. *Conclusion on the Final Commitments*

(202) For the reasons outlined above, the commitments entered into by the Notifying Party are sufficient to eliminate the serious doubts as to the compatibility of the Transaction with the internal market.

(203) Under the first sentence of the second subparagraph of Article 6(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into vis-à-vis the Commission with a view to rendering the concentration compatible with the internal market.

¹⁸⁷ Notifying Party's response to request for information 13, question 2.

- (204) The fulfilment of the measures that gives rise to the structural change of the market is a condition, whereas the implementing steps which are necessary to achieve this result are generally obligations on the Parties. Where a condition is not fulfilled, the Commission's decision declaring the concentration compatible with the internal market and the EEA Agreement is no longer applicable. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with Article 6(3) of the Merger Regulation. The undertakings concerned may also be subject to fines and periodic penalty payments under Articles 14(2) and 15(1) of the Merger Regulation.
- (205) The commitments in Section B of the Final Commitments set out in the Annex constitute conditions attached to this decision, as only through full compliance therewith can the structural changes in the relevant markets be achieved. The other commitments set out in the Annex constitute obligations, as they concern the implementing steps which are necessary to achieve the modifications sought in a manner compatible with the internal market.
- (206) The full text of the Final Commitments is annexed to this Decision as Annex and forms an integral part thereof.

6. CONCLUSION

- (207) For the above reasons, the Commission has decided not to oppose the notified operation as modified by the commitments and to declare it compatible with the internal market and with the functioning of the EEA Agreement, subject to full compliance with the conditions in Section B of the commitments annexed to the present decision and with the obligations contained in the other sections of the said commitments. This decision is adopted in application of Article 6(1)(b) in conjunction with Article 6(2) of the Merger Regulation and Article 57 of the EEA Agreement.

*For the Commission
(Signed)
Julian KING
Member of the Commission*

Case No. COMP/M.8440 – DuPont / FMC (Health and Nutrition Business)

COMMITMENTS TO THE EUROPEAN COMMISSION

18 July 2017

Pursuant to Article 6(2) of Council Regulation (EC) No 139/2004 (the "**Merger Regulation**"), E. I. du Pont de Nemours and Company ("**DuPont**" or the "**Notifying Party**") hereby provides the following Commitments (the "**Commitments**") *vis-à-vis* the European Commission (the "**Commission**") with a view to rendering the acquisition of sole control of the majority of FMC's Health and Nutrition business (the "**Transaction**") compatible with the common market and the functioning of the EEA Agreement.

This text shall be interpreted in light of the Commission's decision pursuant to Article 6(1)(b) of the Merger Regulation to declare the Concentration compatible with the internal market and the functioning of the EEA Agreement (the "**Decision**"), in the general framework of European Union law, in particular in light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (the "**Remedies Notice**").

Section A. Definitions

1. For the purposes of these Commitments, the following terms shall have the following meaning:
 - **Additional Business:** the additional business of all pectin-alginate mixtures, currently manufactured and blended at Landerneau, and sold under the *GRINDSTED® FB Stabiliser Systems* range and *GRINDSTED® EP 0023 FRX* (together "**Pectin-Alginates**"), and all inventory and stock at Closing, as well as all intangible assets including, but not limited to, know-how, patents, IP, pipeline products and formulations related predominantly or exclusively to the sourcing, development, production or sale of Pectin-Alginates, except with regards to the sourcing of Pectin. A non-exhaustive list of Additional Business brands and product lines is included at [Appendix 5](#).
 - **Additional Personnel:** the additional personnel, available at the Purchaser's option, as detailed in the Schedule.
 - **Affiliated Undertakings:** undertakings controlled by DuPont and / or by the ultimate parents of DuPont, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation, and in light of the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the "**Consolidated Jurisdictional Notice**").
 - **Assets:** the assets that relate exclusively or predominantly to, and / or that are necessary to ensure the viability and competitiveness of, the Divestment Business as indicated in Section B, paragraph 6(a), (b) and (c), and described in more detail in the Schedule.
 - **Closing:** the transfer of legal title to the Divestment Business to the Purchaser.

- **Closing Period:** the period of [...] from the later of the approval of the Purchaser and the terms of sale by the Commission or the closing of the Transaction.
- **Confidential Information:** any business secrets, know-how, commercial information, or any other information of a proprietary nature that is not in the public domain.
- **Conflict of Interest:** any conflict of interest that impairs the Trustee's objectivity and independence in discharging its duties under the Commitments.
- **Divestment Business:** the business or businesses as defined in Section B, and in the Schedule which DuPont commits to divest.
- **Divestiture Trustee:** one or more natural or legal persons who is / are approved by the Commission and appointed by DuPont or a DuPont Affiliated Undertaking and who has / have received from DuPont or a DuPont Affiliated Undertaking the exclusive Trustee Mandate to sell the Divestment Business to a Purchaser at no minimum price.
- **Effective Date:** the date of adoption of the Decision.
- **First Divestiture Period:** the period of [...] from the Effective Date.
- **Hold Separate Manager:** the person appointed by DuPont or a Dupont Affiliated Undertaking for the Divestment Business to manage the day-to-day business under the supervision of the Monitoring Trustee.
- **Key Personnel:** all personnel necessary to maintain the viability and competitiveness of the Divestment Business, as listed in the Schedule, including the Hold Separate Manager.
- **Monitoring Trustee:** one or more natural or legal person(s) who is / are approved by the Commission and appointed by DuPont or a DuPont Affiliated Undertaking, and who has / have the duty to monitor DuPont's compliance with the conditions and obligations attached to the Decision.
- **Parties:** the Notifying Party and FMC Corporation.
- **Personnel:** all staff currently employed by Dansico Landerneau SAS.
- **Purchaser:** the entity approved by the Commission as acquirer of the Divestment Business in accordance with the criteria set out in Section D.
- **Purchaser Criteria:** the criteria laid down in paragraph 16 of these Commitments that the Purchaser must fulfil in order to be approved by the Commission.
- **Schedule:** the schedule to these Commitments describing more in detail the Divestment Business.
- **Trustee(s):** the Monitoring Trustee and / or the Divestiture Trustee as the case may be.

- **Trustee Divestiture Period:** the period of [...] from the end of the First Divestiture Period.

Section B. The commitment to divest and the Divestment Business

2. In order to maintain effective competition, DuPont commits to divest, or procure the divestiture of the Divestment Business by the end of the Trustee Divestiture Period as a going concern to a purchaser and on terms of sale approved by the Commission in accordance with the procedure described in paragraph 17 of these Commitments. To carry out the divestiture, DuPont commits to find a purchaser and to enter into a final binding sale and purchase agreement for the sale of the Divestment Business within the First Divestiture period. If DuPont has not entered into such an agreement at the end of the First Divestiture period, DuPont shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Business in accordance with the procedure described in paragraph 29 in the Trustee Divestiture Period.
3. DuPont shall be deemed to have complied with this commitment if:
 - (a) by the end of the Trustee Divestiture Period, DuPont or the Divestiture Trustee have entered into a final binding sale and purchase agreement and the Commission approves the proposed purchaser and the terms of sale as being consistent with the Commitments in accordance with the procedure described in paragraph 17; and
 - (b) the Closing of the sale of the Divestment Business to the Purchaser takes place within the Closing Period.
4. In order to maintain the structural effect of the Commitments, DuPont shall, for a period of 10 years after Closing, not acquire, whether directly or indirectly, the possibility of exercising influence (as defined in paragraph 43 of the Remedies Notice, footnote 3) over the whole or part of the Divestment Business, unless, following the submission of a reasoned request from DuPont showing good cause and accompanied by a report from the Monitoring Trustee (as provided in paragraph 43 of these Commitments), the Commission finds that the structure of the market has changed to such an extent that the absence of influence over the Divestment Business is no longer necessary to render the proposed concentration compatible with the internal market.

Structure and definition of the Divestment Business

5. The Divestment Business consists of DuPont's global alginate business as detailed in the Schedule which forms an integral part of the Commitments.
6. The Divestment Business, described in more detail in the Schedule, includes all assets and staff that contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business, in particular:
 - (a) all tangible and intangible assets (including rights in intellectual property);
 - (b) all licences, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Business;

- (c) all contracts, leases, commitments and customer orders of the Divestment Business; all customer, credit and other records of the Divestment Business; and
 - (d) the Personnel.
7. Strict firewall procedures will be adopted so as to ensure that any competitively sensitive information related to, or arising from the transitional arrangements described in the Schedule will not be shared with, or passed on to, anyone, other than for the purpose of the implementation of the Commitments.

Section C. Related commitments

Preservation of viability, marketability and competitiveness

8. From the Effective Date until Closing, DuPont shall preserve or procure the preservation of the economic viability, marketability and competitiveness of the Divestment Business, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Business. In particular DuPont undertakes:
- (a) not to carry out any action that might have a significant adverse impact on the value, management or competitiveness of the Divestment Business or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Business;
 - (b) to make available, or procure to make available, sufficient resources for the development of the Divestment Business, on the basis and continuation of the existing business plans;
 - (c) to take all reasonable steps, or procure that all reasonable steps are being taken, including appropriate incentive schemes (based on industry practice), to encourage all Key Personnel to remain with the Divestment Business, and not to solicit or move any Personnel to DuPont's remaining business. Where, nevertheless, individual members of the Key Personnel exceptionally leave the Divestment Business, DuPont shall provide a reasoned proposal to replace the person or persons concerned to the Commission and the Monitoring Trustee. DuPont must be able to demonstrate to the Commission that the replacement is well suited to carry out the functions exercised by those individual members of the Key Personnel. The replacement shall take place under the supervision of the Monitoring Trustee, who shall report to the Commission.

Hold-separate obligations

9. DuPont commits, from the Effective Date until Closing, to keep the Divestment Business separate from the business(es) it is retaining and to ensure that unless explicitly permitted under these Commitments: (i) management and staff of the businesses retained by DuPont have no involvement in the Divestment Business; (ii) the Key Personnel, Personnel and the Additional

Personnel (if applicable) of the Divestment Business have no involvement in any business retained by DuPont and do not report to any individual outside the Divestment Business.

10. Until Closing, DuPont shall assist the Monitoring Trustee in ensuring that the Divestment Business is managed as a distinct and saleable entity separate from the business(es) which DuPont is retaining. Immediately after the adoption of the Decision, DuPont shall appoint a Hold Separate Manager. The Hold Separate Manager, who shall be part of the Key Personnel, shall manage the Divestment Business independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the businesses retained by DuPont. The Hold Separate Manager shall closely cooperate with and report to the Monitoring Trustee and, if applicable, the Divestiture Trustee. Any replacement of the Hold Separate Manager shall be subject to the procedure laid down in paragraph 8(c) of these Commitments. The Commission may, after having heard DuPont, require DuPont to replace the Hold Separate Manager. To the extent this may be required, to ensure that the Divestment Business is held and managed as a separate entity the Monitoring Trustee shall exercise DuPont's rights as shareholder in the legal entity that constitutes the Divestment Business (except for its rights in respect of dividends that are due before Closing), with the aim of acting in the best interest of the business, which shall be determined on a stand-alone basis, as an independent financial investor, and with a view to fulfilling DuPont's obligations under the Commitments. Furthermore, the Monitoring Trustee shall have the power to replace members of the supervisory board or non-executive directors of the board of directors, who have been appointed on behalf of DuPont. Upon request of the Monitoring Trustee, any of DuPont's nominees shall resign as a member of the boards or shall cause such members of the boards to resign.

Ring-fencing

11. DuPont shall implement, or procure to implement, all necessary measures to ensure that it does not, after the Effective Date, obtain any Confidential Information relating to the Divestment Business. Any such Confidential Information obtained by DuPont before the Effective Date will be eliminated and not be used by DuPont. This includes measures *vis-à-vis* DuPont's appointees on the supervisory board and/or board of directors of the Divestment Business. In particular, the participation of the Divestment Business in any central information technology network shall be severed to the extent possible, without compromising the viability of the Divestment Business. DuPont may obtain or keep information relating to the Divestment Business which is reasonably necessary for the divestiture of the Divestment Business or the disclosure of which to DuPont is required by law.

Non-solicitation clause

12. The Parties undertake, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit, the Key Personnel transferred with the Divestment Business for a period of three (3) years after Closing.

Due diligence

13. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, DuPont shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:
 - (a) provide to potential purchasers sufficient information as regards the Divestment Business; and
 - (b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

14. DuPont shall submit written reports in English on potential purchasers of the Divestment Business and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than ten (10) days after the end of every month following the Effective Date (or otherwise at the Commission's request). DuPont shall submit a list of all potential purchasers having expressed interest in acquiring the Divestment Business to the Commission at each and every stage of the divestiture process, as well as a copy of all the offers made by potential purchasers within five (5) days of their receipt.
15. DuPont shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit a copy of any information memorandum to the Commission and the Monitoring Trustee before sending the memorandum out to potential purchasers.

Section D. The Purchaser

16. In order to be approved by the Commission, the Purchaser must fulfil the following criteria:
 - (a) The Purchaser shall be independent of and unconnected to DuPont and its Affiliated Undertakings (this being assessed having regard to the situation following the divestiture);
 - (b) The Purchaser shall have the financial resources, proven expertise and incentive to maintain and develop the Divestment Business as a viable and active competitive force in competition with the Parties and other competitors. In particular, the Purchaser shall have [...], capability to source independently sufficient volumes of raw materials such as Pectin and seaweed to enable Landerneau to operate at full capacity, [...];
 - (c) The acquisition of the Divestment Business by the Purchaser must neither be likely to create, in light of the information available to the Commission, *prima facie* competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed. In particular, the Purchaser must reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Business.

17. The final binding sale and purchase agreement (as well as ancillary agreements) relating to the divestment of the Divestment Business shall be conditional on the Commission's approval. When DuPont has reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), within one (1) week to the Commission and the Monitoring Trustee. DuPont must be able to demonstrate to the Commission that the purchaser fulfils the Purchaser Criteria and that the Divestment Business is being sold in a manner consistent with the Commission's Decision and the Commitments. For the approval, the Commission shall verify that the purchaser fulfils the Purchaser Criteria and that the Divestment Business is being sold in a manner consistent with the Commitments including their objective to bring about a lasting structural change in the market. The Commission may approve the sale of the Divestment Business without one or more Assets or parts of the Personnel, or by substituting one or more Assets or parts of the Personnel with one or more different assets or different personnel, if this does not affect the viability and competitiveness of the Divestment Business after the sale, taking account of the proposed purchaser.

Section E. Trustee

I. Appointment procedure

18. DuPont shall appoint a Monitoring Trustee to carry out the functions specified in these Commitments for a Monitoring Trustee. DuPont commits not to close the Transaction before the appointment of a Monitoring Trustee.
19. If DuPont has not entered into a binding sale and purchase agreement regarding the Divestment Business one (1) month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by DuPont at that time or thereafter, DuPont shall appoint a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Trustee Divestiture Period.
20. The Trustee shall:
 - (i) at the time of appointment, be independent of the Parties and its/their Affiliated Undertakings;
 - (ii) possess the necessary qualifications to carry out its mandate, for example have sufficient relevant experience as an investment banker or consultant or auditor; and
 - (iii) neither have nor become exposed to a Conflict of Interest.
21. The Trustee shall be remunerated by DuPont in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Business, such success premium may only be earned if the divestiture takes place within the Trustee Divestiture Period.

Proposal by DuPont

22. No later than two (2) weeks after the Effective Date, DuPont shall submit the names of three (3) natural or legal persons whom DuPont proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one (1) month before the end of the First Divestiture Period or on request by the Commission, DuPont shall submit a list of one (1) or more persons whom DuPont proposes to appoint as Divestiture Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the person or persons proposed as Trustee fulfil the requirements set out in paragraph 20 and shall include:
- (a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments;
 - (b) the outline of a work plan which describes how the Trustee intends to carry out its assigned tasks; and
 - (c) an indication whether the proposed Trustee is to act as both Monitoring Trustee and Divestiture Trustee or whether different trustees are proposed for the two functions.

Approval or rejection by the Commission

23. The Commission shall have the discretion to approve or reject the proposed Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Trustee to fulfil its obligations. If only one (1) name is approved, DuPont shall appoint or cause to be appointed the person or persons concerned as Trustee, in accordance with the mandate approved by the Commission. If more than one (1) name is approved, DuPont shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one (1) week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by DuPont

24. If all the proposed Trustees are rejected, DuPont shall submit the names of at least two (2) more natural or legal persons within one (1) week of being informed of the rejection, in accordance with paragraphs 18 and 23 of these Commitments.

Trustee nominated by the Commission

25. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom DuPont shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

II. Functions of the Trustee

26. The Trustee shall assume its specified duties and obligations in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or DuPont, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee

27. The Monitoring Trustee shall:
- (i) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision.
 - (ii) oversee, in close co-operation with the Hold Separate Manager, the on-going management of the Divestment Business with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by DuPont with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:
 - (a) monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Business, and the keeping separate of the Divestment Business from the business retained by DuPont, in accordance with paragraphs 8 and 9 of these Commitments;
 - (b) supervise the management of the Divestment Business as a distinct and saleable entity, in accordance with paragraph 10 of these Commitments;
 - (c) with respect to Confidential Information:
 - determine all necessary measures to ensure that DuPont does not after the Effective Date obtain any Confidential Information relating to the Divestment Business,
 - in particular strive for the severing of the Divestment Business' participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Business,
 - make sure that any Confidential Information relating to the Divestment Business obtained by DuPont before the Effective Date is eliminated and will not be used by DuPont, and
 - decide whether such information may be disclosed to or kept by DuPont as the disclosure is reasonably necessary to allow DuPont to carry out the divestiture or as the disclosure is required by law;

- (d) monitor the splitting of assets and the allocation of Personnel between the Divestment Business and DuPont or Affiliated Undertakings;
- (iii) propose to DuPont such measures as the Monitoring Trustee considers necessary to ensure DuPont's compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Divestment Business, the holding separate of the Divestment Business and the non-disclosure of competitively sensitive information;
- (iv) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process:
 - (a) potential purchasers receive sufficient and correct information relating to the Divestment Business and the Personnel in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process, and
 - (b) potential purchasers are granted reasonable access to the Personnel;
- (v) act as a contact point for any requests by third parties, in particular potential purchasers, in relation to the Commitments;
- (vi) provide to the Commission, sending DuPont a non-confidential copy at the same time, a written report within fifteen (15) days after the end of every month that shall cover the operation and management of the Divestment Business as well as the splitting of assets and the allocation of Personnel so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers;
- (vii) promptly report in writing to the Commission, sending DuPont a non-confidential copy at the same time, if it concludes on reasonable grounds that DuPont is failing to comply with these Commitments;
- (viii) within one (1) week after receipt of the documented proposal referred to in paragraph 17 of these Commitments, submit to the Commission, sending DuPont a non-confidential copy at the same time, a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Business after the sale and as to whether the Divestment Business is sold in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the sale of the Divestment Business without one or more Assets or not all of the Personnel affects the viability of the Divestment Business after the sale, taking account of the proposed purchaser;
- (ix) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision.

28. If the Monitoring and Divestiture Trustee are not the same legal or natural persons, the Monitoring Trustee and the Divestiture Trustee shall cooperate closely with each other during and for the purpose of the preparation of the Trustee Divestiture Period in order to facilitate each other's tasks.

Duties and obligations of the Divestiture Trustee

29. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell at no minimum price the Divestment Business to a purchaser, provided that the Commission has approved both the purchaser and the final binding sale and purchase agreement (and ancillary agreements) as in line with the Commission's Decision and the Commitments in accordance with paragraphs 16 and 17 of these Commitments. The Divestiture Trustee shall include in the sale and purchase agreement (as well as in any ancillary agreements) such terms and conditions as it considers appropriate for an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the sale and purchase agreement such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Trustee shall protect the legitimate financial interests of DuPont, subject to DuPont's unconditional obligation to divest at no minimum price in the Trustee Divestiture Period.
30. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within fifteen (15) days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to DuPont.

III. Duties and obligations of the Parties

31. DuPont shall provide and shall cause its advisors to provide the Trustee with all such cooperation, assistance and information as the Trustee may reasonably require to perform its tasks. The Trustee shall have full and complete access to any of DuPont's or the Divestment Business' books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and DuPont and the Divestment Business shall provide the Trustee upon request with copies of any document. DuPont and the Divestment Business shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.
32. DuPont shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business which are currently carried out at headquarters level. DuPont shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. DuPont shall inform the Monitoring Trustee on possible purchasers, submit lists of potential

purchasers at each stage of the selection process, including the offers made by potential purchasers at those stages, and keep the Monitoring Trustee informed of all developments in the divestiture process.

33. DuPont shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the sale (including ancillary agreements), the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the sale and the Closing, including the appointment of advisors to assist with the sale process. Upon request of the Divestiture Trustee, DuPont shall cause the documents required for effecting the sale and the Closing to be duly executed.
34. DuPont shall indemnify the Trustee and its employees and agents (each an "**Indemnified Party**") and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to DuPont for, any liabilities arising out of the performance of the Trustee's duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.
35. At the expense of DuPont, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to DuPont's approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should DuPont refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard DuPont. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 34 of these Commitments shall apply *mutatis mutandis*. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served DuPont during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale.
36. DuPont agrees that the Commission may share Confidential Information proprietary to DuPont with the Trustee. The Trustee shall not disclose such information and the principles contained in Article 17 (1) and (2) of the Merger Regulation apply *mutatis mutandis*.
37. DuPont agrees that the contact details of the Monitoring Trustee are published on the website of the Commission's Directorate-General for Competition and they shall inform interested third parties, in particular any potential purchasers, of the identity and the tasks of the Monitoring Trustee.
38. For a period of ten (10) years from the Effective Date the Commission may request all information from the Parties that is reasonably necessary to monitor the effective implementation of these Commitments.

IV. Replacement, discharge and reappointment of the Trustee

39. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a Conflict of Interest:
- (a) the Commission may, after hearing the Trustee and DuPont, require DuPont to replace the Trustee; or
 - (b) DuPont may, with the prior approval of the Commission, replace the Trustee.
40. If the Trustee is removed according to paragraph 39 of these Commitments, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 18-25 of these Commitments.
41. Unless removed according to paragraph 39 of these Commitments, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

Section F. The review clause

42. The Commission may extend the time periods foreseen in the Commitments in response to a request from DuPont or, in appropriate cases, on its own initiative. Where DuPont requests an extension of a time period, it shall submit a reasoned request to the Commission no later than one (1) month before the expiry of that period, showing good cause. This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time send a non-confidential copy of the report to the Notifying Party. Only in exceptional circumstances shall DuPont be entitled to request an extension within the last month of any period.
43. The Commission may further, in response to a reasoned request from DuPont showing good cause waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments. This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time send a non-confidential copy of the report to DuPont. The request shall not have the effect of suspending the application of the undertaking and, in particular, of suspending the expiry of any time period in which the undertaking has to be complied with.

Section G. Entry into force

44. The Commitments shall take effect upon the date of adoption of the Decision.
(Signed)
duly authorised for and on behalf of DuPont

SCHEDULE

1. The proposed Commitments offered by DuPont consist of the divestiture to a suitable purchaser (the "**Purchaser**") of DuPont's global alginates business, including the products listed in Appendix 1, and including but not limited to those currently manufactured and sold under the *GRINDSTED*® *Alginate* brand ("**Alginate(s)**") as defined in this Schedule (hereinafter referred to as the "**Divestment Business**"). Further, the Divestment Business will include the Additional Business.
2. Specifically, the Divestment Business comprises the following elements:
 - (a) The French legal entity Danisco Landerneau SAS;
 - (b) All tangible and intangible assets as necessary to ensure the viability and competitiveness of the Divestment Business and/or used exclusively or predominantly for the sourcing, development, manufacturing, packaging, or sale of Alginates;
 - (c) At the Purchaser's option, the Additional Personnel; and
 - (d) All tangible and intangible assets used as necessary to ensure the viability and competitiveness of the Divestment Business and/or exclusively or predominantly for the sourcing, development, manufacturing, packaging, or sale of Pectin-Alginates, except with regards to the sourcing of Pectin.
3. The Divestment Business includes, but is not limited to, the following tangible and intangible assets:

Tangible Assets

- (a) DuPont's production facility in Landerneau (France), and all related assets, held by Danisco Landerneau SAS;
- (b) All inventory and stock of Alginates and Pectin-Alginates, at the time of the Closing; and
- (c) Existing sales and promotional material designed for and used exclusively or predominantly for, and/or necessary for the viability and competitiveness of the sourcing, development, manufacturing, packaging, or sale of Alginates;
- (d) Existing sales and promotional material designed for and used exclusively or predominantly for, and/or necessary for the viability and competitiveness of the sourcing, manufacturing, packaging, or sale of Pectin-Alginates, except with regards to the sourcing of Pectin.

Personnel

- (e) Subject to the applicable local employment legislation, DuPont commits to transfer to the Purchaser the following personnel:
 - (i) The Personnel;

- (ii) The Key Personnel; and
- (iii) At the Purchaser's option, Additional Personnel, not currently employed by Danisco Landerneau SAS, comprised of [...] commercial, administration (finance and IT), and R&D / application personnel.

A full list of the Key Personnel, Personnel and Additional Personnel, and their respective roles is included at **Appendix 2**.

Intangible assets

4. The Divestment Business comprises the following intangible assets:

- (a) **Pipeline products:** [...].
- (b) **Patents.** DuPont will transfer or license the patents owned by DuPont that are related exclusively or predominantly to, and / or necessary for the viability and competitiveness of the production or sale of Alginates (and Pectin-Alginates). A non-exhaustive list of such patents is included at listed at **Appendix 3**.
- (c) **Know-how.** DuPont will transfer or license know-how and any other IP owned by DuPont that are related exclusively or predominantly to, and / or necessary for the viability and competitiveness of, the sourcing, development, production or sale of Alginates (and Pectin-Alginates), including know-how relating to past pipeline projects for Alginates (and Pectin-Alginates), without limitation to previously abandoned pipeline projects.
- (d) **Other intangible assets.** The Divestment Business will also include:
 - (i) A list of Alginate (and Pectin-Alginates) customers and distributors for the period from 2006 to the date of Closing, as well as all other available Alginate specific information for said customers and distributors, including but not limited to, customer records, customer reports, transactional data and customer accreditations. A non-exhaustive list of such Alginate and Pectin-Alginates customers and distributors is included at **Appendix 4**.
 - (ii) To the extent they relate exclusively or predominantly to, and / or are necessary for the viability or competitiveness of, the sale of Alginates (and Pectin-Alginates), DuPont will use its reasonable best efforts to facilitate the transfer of sourcing, distribution and customer contracts and / or relationships relating to Alginates (and Pectin-Alginates), to the Purchaser.
 - (iii) All necessary licenses, permits and authorizations, including GMP and CEP where applicable, issued by any governmental organization to the extent they relate exclusively or predominantly to, and / or are necessary for the viability or competitiveness of, the sourcing, development, production or sale of Alginates (and Pectin-Alginates).

- (iv) DuPont will use its reasonable best efforts to transfer assignable sourcing and supply agreements to the extent they relate exclusively or predominantly to, and / or are necessary for the viability or competitiveness of, the sourcing, development, production or sale of Alginates (and Pectin-Alginates).

5. **Brands.** For the avoidance of doubt, DuPont's *GRINDSTED*® and *GRINDSTED*® *Alginate* brand, and all related product names and trademarks will not be transferred to the Purchaser. Instead, the Purchaser will receive a royalty-free global license to use DuPont's *GRINDSTED*® *Alginate* brand and any associated trademarks and product names for a period of [...] from Closing for the purposes set forth below. A non-exhaustive list of DuPont's current *GRINDSTED*® *Alginate* branded product lines is included at **Appendix 1**.

- (a) During this [...] period, the Purchaser will be allowed to sell existing inventory of finished *GRINDSTED*® *Alginate* branded alginates products on a global basis. During this same [...] period, the Purchaser will be allowed to continue producing and selling Alginates, using the *GRINDSTED*® *Alginate* brand, on a global basis, but shall not be allowed to produce, launch into the market, or otherwise sell any other *GRINDSTED*® branded products, provided that in all such use of the *GRINDSTED*® *Alginate* brand the company name of the Purchaser is explicitly and clearly stated.
- (b) During this same [...] period, the Purchaser shall re-brand the *GRINDSTED*® *Alginate* brand to one of its own brands. This same [...] period can be extended for multiple [...] periods up to a maximum period of [...] in the aggregate, if at the end of the initial [...] period, notwithstanding its reasonable best efforts, the Purchaser will require additional time for the re-branding of the Alginates. In such case, the Purchaser will submit a reasoned request for extension to the Monitoring Trustee no later than one (1) month before the expiry of that period. The request shall be based on objective criteria to be determined under the supervision of the Monitoring Trustee who will in its judgment determine whether the criteria for the extension are met. The Monitoring Trustee will specifically consider in making its decision as to whether to grant an extension, whether the Purchaser's actions prior to the date of the request represent the Purchaser's reasonable best efforts to complete the re-branding of the Alginates during the initial [...] period (or during any extension period previously granted by the Monitoring Trustee).
- (c) DuPont shall not sell alginates on a global basis under the *GRINDSTED*® *Alginate* brand during the periods referenced in (a)-(b) above, and for an additional [...] period following the end of the periods referenced in (a)-(b) above.
- (d) For a period not exceeding [...] from the end of the period referenced in (a) above, the Purchaser may, at its option, indicate on the packaging and marketing material of its alginates that such alginates are a "successor to" the relevant "*GRINDSTED*® *Alginate*" product, as long as such alginates are identical to DuPont's legacy formulations.
- (e) For the avoidance of doubt, the provisions of clauses 5, 5(a)-(d) above will apply *mutatis mutandis* to the brands and product lines for Pectin-Alginates. A non-exhaustive list of Pectin-Alginates brands and product lines is included at **Appendix 5**.

6. **Supply Agreement.** A transition supply agreement for up to [...], entered into by DuPont and the Purchaser, at the Purchaser's option, to supply the Purchaser, [...], with Pectin for the sole purpose of manufacturing Pectin-Alginates blends at Landerneau. This [...] period can be extended at the Purchaser's option by [...], where such arrangements will be offered at reasonable commercial terms negotiated with the Purchaser. [...]. A non-exhaustive list of Pectin-Alginates brands and product lines is included at **Appendix 5**.

7. If there is any asset or personnel which is not covered by paragraphs 1 - 6 of this Schedule but which is both used (exclusively or not) in the Divestment Business and necessary for the continued viability and competitiveness of the Divestment Business, that asset or adequate substitute will be offered to potential purchasers.

Appendices to the Commitments

[...]