EN

Case No COMP/M.7115 - KURARAY/ GLSV 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)
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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 Where possible the information omitted has been replaced by ranges of figures or a general description.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

MERGER PROCEDURE

To the notifying party:

Dear Sir/Madam,

Subject: Case M.7115 – Kuraray/ GLSV Business
Commission decision pursuant to Article 6(1)(b) in conjunction with Article 6(2) of Council Regulation No 139/2004[1]

1. On 6 March 2014, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 ("the Merger Regulation") by which Kuraray Co., Ltd. ("Kuraray", Japan) acquires within the meaning of Article 3(1)(b) of the Merger Regulation sole control over the Glass Laminating Solutions/Vinyls Business ("GLSV") of E. I. du Pont de Nemours and Company ("DuPont", USA), by way of purchase of assets. Kuraray and GLSV are hereinafter collectively referred to as "the Parties" while Kuraray individually is referred to as "Notifying Party".

I. THE PARTIES AND THE OPERATION

2. **Kuraray** is a manufacturer of specialty chemicals, fibres and other materials, incorporated in Japan and listed on the Tokyo Stock Exchange. Kuraray's main products are functional resins and film (used to produce adhesives, LCD screens, interlayers for laminated safety glass, or food packaging), synthetic isoprene chemical products, synthetic leather, vinylon fibre (a substitute for asbestos), and polyester fibre.

1 OJ L 24, 29.1.2004 p. 1. 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.

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3. **DuPont** is a science and technology company incorporated in Delaware, USA, and listed on the New York Stock Exchange. DuPont is engaged in the R&D, production and sale of a variety of chemical products, plastics, paints, agrochemicals, seeds, nutritional ingredients and other materials.

4. The target, **GLSV**, wholly owned and controlled by DuPont, is comprised of assets relating to the manufacture and sale of Vinyl Acetate Monomer ("VAM"), Polyvinyl Alcohol ("PVA"), Polyvinyl Butyral ("PVB") resin and PVB film, all forming part of the same vertically-integrated value chain, and DuPont's trademarked interlayer product, Sentryglas. The assets to be acquired include manufacturing equipment, buildings, customer lists, contracts and inventories. All intellectual property required to operate GLSV will be assigned or licensed.

5. According to the Asset Purchase Agreement signed between Kuraray and DuPont on 21 November 2013, Kuraray will acquire sole control over GLSV. Therefore, the proposed transaction constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

II. EU DIMENSION

6. The operation does not have an EU dimension within the meaning of Article 1 of the Merger Regulation as the aggregate Union-wide turnover achieved by GLSV does not exceed EUR 100 million.

7. However, on 23 December 2013 the operation acquired Union dimension through a referral under Article 4(5) of the Merger Regulation.

III. MARKETS CONCERNED BY THE TRANSACTION

8. The markets concerned by this transaction are the markets for (i) VAM, (ii) PVA, (iii) PVB resin and (iv) PVB film. All four markets are part of the same value chain: VAM is used to produce PVA, which is used to produce PVB resin, which in turn is used to produce PVB film. PVB film is then sold to glass manufacturers to be used as an adhesive interlayer in the production of laminated safety glass, for automotive (e.g. windshields) or architecture (e.g. windows) applications.

9. The markets horizontally affected by the transaction concern the production of (i) PVA and (ii) PVB film. Furthermore, the operation would give rise to vertically affected markets between (i) VAM and PVA, and (ii) PVA and PVB resin.

IV. HORIZONTALLY AFFECTED MARKETS

A. PVA

1. Product market definition

10. PVA is a water-soluble and biodegradable polymer with strong film formation properties and high binding power. PVA is produced in a number of grades and is used in a variety of applications in different industries, including the paper, the textile and pharmaceutical industries. Typically, four PVA grades are distinguished according to their level of hydrolysis: (i) low, (ii) partially, (iii) fully and (iv) super hydrolysed. PVA is the most important raw material for the production of PVB resin, representing 35-50% of PVB resin input costs. PVB resin accounts for 28% of global PVA consumption. The super, fully, and partially hydrolysed

PVA grades are referred to as "standard" PVA, as opposed to "specialty" PVA comprising the more specialized grade such as low hydrolysed PVA as well as other special PVA grades (e.g. co-polymer or modified PVA).

11. In its previous decisions, the Commission indicated that the market for PVA might be subdivided into segments based on the level of hydrolysis, i.e. distinguishing the fully hydrolysed grades and partially hydrolysed grades, but ultimately left the definition open. The Commission however concluded that the product market should not be wider than PVA, as PVA does not have any substitutable products.[2]

12. The Notifying Party submits that PVA constitutes a single product market and should not be segmented any further: while specific grades of PVA are required for specific end use applications, there is a high degree of supply-side substitutability as all PVA producers are able to produce all grades.

13. The information obtained by the Commission in the course of its market investigation indicated that concerning the value chain affected by the proposed transaction, PVB resin can be produced using all standard PVA, i.e. partially, fully and super hydrolysed PVA.[3] From the supply-side perspective all grades of PVA (from low to super hydrolysed) are produced using similar production process and raw materials.[4] Partially, fully and super hydrolysed PVA (i.e. standard PVA) can even be produced using the same production line.[5] The time required to switch production between these different PVA grades would generally be half a day or one day.[6] Therefore, the Commission considers that there is a significant degree of supply-side substitution between all grades of PVA and especially grades of standard PVA.

14. However, the precise product market definition regarding PVA can ultimately be left open for the purpose of this Decision, as the outcome of the competitive assessment in the present case would not change irrespective of the precise market definition applied to PVA.

2. Geographic market definition

15. In a previous decision, the Commission considered that the relevant geographic market for PVA is global.[7]

16. The Notifying Party submits that the relevant geographic market for PVA is worldwide. There are significant trade flows of PVA between world regions and a significant proportion of European demand is met by imports from Japan, China, the United States and Taiwan. In

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2 See Commission decision in case COMP/M.3625 *Blackstone / Acetex* (2005), paragraph 25. In *C/0154/09 Sekisui / Celanese* (2001), the Spanish Competition authority ultimately left open whether the market should be further distinguished between "standard" PVA (comprising super, fully and partially-hydrolised PVA) and "specialty" PVA (comprising low-hydrolised PVA and copolymer or "modified" PVA).

3 Replies to Questionnaire Q3 – questions 8-9.

4 Replies to Questionnaire Q3 – question 10. Only Sekisui indicated the production process may be different for low hydrolysed PVA. However, Sekisui also agreed that for partially to super hydrolysed PVA the production process and raw materials are very similar.

5 Replies to Questionnaire Q3 – question 11.

6 Replies to Questionnaire Q3 – questions 12-13.

7 See Commission decision in case COMP/M.3625 *Blackstone / Acetex* (2005), paragraph 82.

addition, the transport costs to ship PVA between regions are relatively insignificant (accounting for less that 3-5% of the total sales price).

17. Respondents to the Commission's market investigation also confirmed that most customers source PVA from various regions of the world and that there are no significant barriers to trade for most types of PVA from or into the EEA.[8] However, the information obtained by the Commission in the course of its market investigation also revealed that there remain significant price differences between world regions, with PVA being 30-40% more expensive in the EEA than in Asia.[9]

18. However, the Commission considers that the precise geographic market definition regarding PVA can ultimately be left open for the purpose of this Decision, as the outcome of the competitive assessment in the present case would not change irrespective of the geographic market definition applied to PVA.

3. <u>Competitive assessment</u>

19. The concentration will give rise to a horizontal overlap of the Parties' activities in relation to the market for PVA. The Parties' combined market shares will reach [10-20]% in volume ([20-30]% in value) worldwide. While in the EEA the combined market shares are somewhat higher, reaching [30-40]% in volume ([30-40]% in value), due to GVLS' business limited position in Europe the market share increment brought about by the transaction remains minor, around [0-5]% over the last 3 years.

20. When considering the Parties' market shares on any more narrowly-defined PVA markets, namely potential markets for "standard" PVA (comprising super, fully, and partially hydrolysed PVA grades) and "specialty" PVA (comprising low hydrolysed and co-polymer or modified PVA grades), the Parties' combined position would not differ from their position on a market for all PVA. In each case, GLSV would have very low market shares and Kuraray's market share in the two potential segments – "standard" PVA and "specialty" PVA - would be between [10-20]% and [10-20]% worldwide and around [40-50]% in the EEA, while GLSV's market shares would be between [0-5]% and [5-10]% worldwide and around [0-5]% in the EEA.

21. Furthermore, during the market investigation PVA customers explained that several strong suppliers will continue to be active on the market and produce PVA suitable for the production of PVB resin for film, such as Sekisui, Eastman, Shin-Etsu, Sinopec, Denka, Nippon Gosei, Chang Chun, Wego Chemical, Wacker Chemie, and Anhui Wanwei.[10]

22. Consequently, it is concluded for the purpose of this Decision that regarding the supply of PVA the transaction does not raise serious doubts as to its compatibility with the internal market under any plausible market definition.

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8 Replies to Questionnaire 3 (question 20) and Questionnaire 4 (questions 10, 11, 12).

9 Replies to Questionnaire 3 (question 22) and Questionnaire 4 (question 13).

10 Replies to Questionnaire Q4 – questions 8-9.

B. PVB film

1. ***Product market definition***

23. PVB film, also referred to as PVB sheet, is the most common end product derived from PVB resin. It is primarily used as an interlayer in the production of laminated safety glass: PVB film is bonded by self-adhesion between two layers of glass to hold them together and give the appearance of one single pane. PVB film has high tensile strength, impact resistance, transparency and elasticity. PVB film adheres tightly to glass so that if either pane breaks, glass fragments remain stuck to the film in between.

24. The two main applications for PVB film are in the manufacturing of laminated safety glass for the automotive and architectural industries. Automobile manufacturers use laminated safety glass in particular to make windshields, while in the construction industry laminated safety glass is widely used in windows for commercial buildings and, to a lesser extent, in residential homes.

25. PVB film is a differentiated product and can vary along different parameters, specifically: (i) thickness;[11] (ii) width;[12] (iii) embossed/melt-fracture surface structure;[13] (iv) acoustic/non-acoustic;[14] (v) coloured/clear;[15] and (vi) virgin/recycled.[16]

26. In a previous case, where PVB film was one of the vertically affected markets, the Commission, without conducting detailed investigation, considered that PVB film may constitute a single relevant product market, without however considering any possibly narrower category and ultimately leaving the product market definition open.[17]

27. According to the Notifying Party, the relevant product market should not be defined narrower than PVB film. Specifically, the Notifying Party submits that the PVB film market should not be segmented by end use/application. First, the Notifying Party claims that architectural and automotive PVB films are technically the same product and all PVB film suppliers manufacture a complete range of films using the same resin and there is no barrier to supply-side substitution on the basis of access to raw materials and processing/know how, or access to the market. Architectural PVB film and automotive PVB film are very often sold in the same thickness and grade. Thus, switching is quick and easy in technical terms and usually requires, at most, changing the additives that are combined with PVB

11 PVB film is sold in a range of different thicknesses, with the most "standard" thickness being 0.76 mm.

12 PVB film is shipped in rolls of varying widths, generally between 700 mm and 3,000 mm. For certain architectural applications, customers purchase rolls 3,210 mm wide referred to as jumbo size, which are manufactured on jumbo lines.

13 Embossing refers to a production process that results in the final PVB film having a defined surface structure, rather than the random surface structure produced by using the melt- fracture process.

14 Acoustic film refers to PVB film that has sound-reducing qualities and is used to manufacture sound-proof glass.

15 PVB film can be manufactured in different colours for use in either architectural or automotive glass by adding a dye and other additives to the PVB resin during production.

16 Together with "virgin" PVB film, certain producers may also manufacture to various extents "recycled" PVB film with recovered PVB film and much lower quantities of PVB resin.

17 See Commission decision in case COMP/M. 6542 *Eastman / Solutia* (2012).

resin during production. All of the four leading PVB film suppliers currently sell PVB film for both applications, although not all four produce the same range of products for each application. Second, prices of PVB film sold for the two applications are closely correlated and they change in corresponding patterns. Third, a large proportion of the Parties' sales are to customers that purchase PVB film to produce both architectural and automotive laminated safety glass, notably the four major global manufacturers of flat glass ([…]).

28. However, the information obtained by the Commission in the course of its market investigation pointed to the possible existence of separate markets for PVB film for architectural applications and PVB film for automotive applications.

29. From the demand side, technical specifications (e.g. adhesiveness, impact resistance) are different, driven by specific safety standards and regulatory requirements for each segment, with in particular standard EN ISO 12543[18] applying downstream to laminated safety glass for architecture applications, but EU Directive 92/22/EEC[19] applying to laminated safety glass for automotive applications. The information obtained in the course of the Commission's market investigation revealed that customers do not use the same PVB film for the two applications and would not switch between the two in case of a price increase of one of them.

30. From the supply side, a large part of architectural applications require specific production equipment that allows producing wide films – the so-called "jumbo" lines. While "non-jumbo"/narrow lines cannot be used to produce jumbo PVB film (approx. 90% of demand for architecture applications in the EEA), jumbo lines can be used to produce narrower PVB film for both automotive and architecture applications (the film is then cut into narrower films) - i.e. there is full one-way supply-side substitutability – but the price will be higher, notably for architectural applications.[20]

31. In addition, production know-how seems to be specific to the two segments and developing a significant presence in one segment, in particular for more specialised film (e.g. coloured or acoustic), requires years of expertise. Market participants confirmed that it takes significant experience to "find the right formula", through which PVB film consistently achieves the exact features required, and that such "right formula" is specific for each type of PVB film. This is also supported by the fact that except for Eastman, the other three producers of PVB film have very different market shares in the two segments. For instance, Sekisui is the market leader in automotive applications whilst its presence in the architectural segment is minimal. Similarly, GLSV and especially Kuraray are strong in the architectural application while their presence in the automotive segment is small, as analysed in section "IV.B.3" of the present Decision.

32. Moreover, pricing of the two segments is fairly independent with no arbitrage opportunities between the two segments. Respondents to the Commission's market investigation have confirmed that, although producers and customers typically enter into contracts covering all PVB film products, prices are discussed product by product.

18 See Questionnaire 1 (question 10.2).

19 Council Directive 92/22/EEC of 31 March 1992 on safety glazing and glazing materials on motor vehicles and their trailers, OJ L 129, 14/05/1992, p. 11–94.

20 See Questionnaire 1 (question 13).

33. On this basis, it is likely that PVB film for automotive and for architectural applications do not belong to the same relevant product market.

34. In addition, the information gathered by the Commission in the context of its market investigation pointed to the possible existence of a separate product segment of coloured PVB film stemming from the fact that on average the price of coloured PVB film is twice the price of clear PVB film.[21]

35. Furthermore, the information gathered by the Commission in the context of its market investigation pointed to the possible existence of a separate segment of recycled PVB film stemming from extrusion lines that are fed almost exclusively with recovered PVB film and much lower quantities of PVB resin.[22] In this case, the PVB film manufacturer will typically purchase trimmings back from its own PVB film customers, as well as gathering trimmings from other extrusion lines. Both Kuraray and the GLSV Business use this method to manufacture "recycled" PVB film, respectively at their Russian and Czech plants.

36. According to the Notifying Party, virgin PVB film and recycled PVB film are functionally almost identical and have almost the same applications, except that recycled film is not typically used in high-end applications.

37. However, the Commission considers that for the purpose of this Decision the precise product market definition can ultimately be left open as to the final application (automotive/architectural), the origin (recycled/virgin) or any other characteristic of PVB film, since, in view of the commitments submitted by the Notifying Party, no serious doubts as to the compatibility of the transaction with the internal market would arise under any plausible market definition.

2. <u>Geographic market definition</u>

38. In a previous case[23], the Commission investigated the relevant geographic market for PVB film, but the results of the market investigation were not conclusive and the definition was ultimately left open.

39. The Notifying Party submits that the market for PVB film is worldwide in scope, on the basis that shipping costs between world regions are small (5% of the sales price) and that extra-EEA imports account for a material share of EEA consumption of PVB film (17% in 2012).

40. The information obtained by the Commission in its market investigation confirmed that shipping costs amount to approximately 5-10% of the sales price and that there are no technical or regulatory barriers to the global trade of PVB film[24].

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21 Form CO, tables 71-78.

22 During the extrusion process, trimmings are cut from the edge of a PVB film sheet to ensure that the final sheet is of the required width. In a standard PVB film production line, these edge trimmings are recovered and fed straight back into the mixer where they are incorporated with PVB resin, plasticizer and additives and extruded into film again. This process, whereby PVB film is made from PVB resin and a small quantity of recovered edge trimmings, produces what is known as "virgin" PVB film.

23 See Case M.6542, *Eastman/Solutia* (2012).

24 See Questionnaire 1 (questions 45 and 46) and Questionnaire 2 (questions 23, 26 and 26)

41. However, respondents to the market investigation pointed to the existence of different quality requirements across world regions, with EEA customers generally requiring higher quality standards than customers in other regions (e.g. Russia or China), due to stricter regulatory requirements in both the architecture and automotive segments applying downstream to laminated safety glass (LSG), and impacting the quality requirements of PVB film[25]. As mentioned in recital 29, all LSG sold in the EEA and used in the architectural sector is governed by the standard EN ISO 12543, while LSG used in automotive applications is subject to standards enforced under EU Directive 92/22/EEC.

42. Respondents also considered lead time and technical/customer services as critical in their choice of a PVB film supplier, resulting in customers' tendency to purchase as close to their manufacturing facility as possible, as long as product specifications and quality requirements are met. The *rationale* for the notified transaction is precisely for Kuraray to acquire GLSV's production facilities in regions where Kuraray currently lack local presence, in order to achieve shorter lead times and build closer customer relationships.

43. Overall, EEA customers seem to have a preference for sourcing PVB film from EEA production facilities. A majority of respondents indicated that they purchase from EEA plants 85% to 100% of their EEA demand[26]. This is confirmed by the Parties' own sales data. For instance, the analysis of Kuraray's 2012 sales out of its production plant in Troisdorf, Germany, showed that [80-90]% of volumes of standard PVB film were shipped within the EEA. While higher value-added, specialised film tends to travel over greater distances, even sales of specialised products remained at [70-80]% within the EEA.

44. The information gathered by the Commission in its market investigation also revealed the existence of price differences between world regions. This is confirmed by Parties' own pricing data. For instance, GLSV's average sales price of PVB film in 2012 was [50-60]% higher in North America than in Europe, and Kuraray's average sales price [10-20]% higher in Asia than in Europe. Importantly, while global glass manufacturers engage with their suppliers in discussions on a global scale, prices for each product are typically negotiated at a regional (EEA) level[27].

45. On this basis, the Commission concludes that for the purposes of this Decision the geographic scope of the PVB film market, irrespective of any potential further product sub-segmentation, should be considered EEA-wide.

3. <u>Competitive assessment</u>

46. The PVB market is concentrated, characterised by the presence of four main players active worldwide, namely Kuraray, GLSV, Eastman and Sekisui. In addition, there are a number of small local suppliers in Asia, which however are not present in Europe.

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25 Since LSG is subject to regulation but PVB film is not, PVB film manufacturers themselves are not required to perform any testing other than their own internal tests to establish the performance characteristics of their products. Based on these characteristics, PVB film is marketed to glass manufacturers who incorporate PVB interlayers into an assembled laminated glass product, which is then tested for compliance with the LSG regulations as described above. The process of testing and regulation is similar in the US where PVB film is not a regulated product but LSG incorporating PVB film is.

26 See Questionnaire 1 (question 35)

27 See Questionnaire 1 (questions 39 and 40) and Questionnaire 2 (questions 18 and 19).

47. The Parties' activities overlap in an overall market for PVB film. Amongst the different segmentations of PVB film, the Parties' activities overlap with respect to PVB film for architectural applications, PVB film for automotive applications, recycled PVB film and coloured PVB film. These five potential markets are analysed in this Decision.[28]

48. The total market value of an overall market for PVB film is estimated at EUR […] at an EEA-wide level. The total market value of an EEA-wide market for architectural applications is estimated at EUR […] and for automotive applications at EUR […].[29] The total market value of an EEA-wide market for recycled PVB film is estimated at EUR […].[30] The total market value of an EEA-wide market for coloured PVB film is estimated at EUR […].[31]

49. The Notifying Party claims that the proposed transaction would not give rise to a significant impediment to effective competition in the PVB film market. On a worldwide basis, the Parties are currently the third and fourth largest suppliers, materially behind Eastman and Sekisui in terms of both capacity and sales. On an EEA-wide basis, the Parties' higher market shares should be attributed to the fact that Sekisui currently has a relatively small presence in the EEA that does not reflect its position in the global market. Although Sekisui has focused on exploiting growth in the automotive sector rather than the architectural sector, it is very well positioned to supply more architectural film and gain a higher share of total available volumes in the EEA. In addition to Eastman and Sekisui, the Notifying Party claims that the Parties face increasing competition from emerging PVB film manufacturers located in China and Taiwan. Finally, the Notifying Party considers that the Parties also face substantial buyer power by the four leading flat glass manufacturers (NSG Pilkington, Saint-Gobain, Guardian and Asahi Glass Company), which account for more than half of total PVB film consumption.

50. In the following sections, the Commission assesses the Notifying Party's arguments in the light of the results of the market investigation and the other available evidence.

a) Coloured PVB film

51. The Parties activities overlap with regard to coloured PVB film used in both architectural and automotive applications. In that potential market the transaction would lead only to a limited combined market share in the EEA, namely [20-30]%. The market leaders are Eastman and Sekisui holding market shares of [40-50]% and [30-40]%. Moreover, the Parties' market shares have remained at approximately the same level during the past three years.

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28 As regards other possible segmentations of the market for PVB film, the Parties' activities do not overlap with regard to embossed and acoustic PVB film.

29 Form CO, Table 53.

30 Form CO, Table 5, extrapolated on the basis of the Commission's market reconstruction.

31 Form CO, Tables 71-78, extrapolated on the basis of the Commission's market reconstruction.

Table 1: Reconstruction of market shares in coloured PVB film

COLOURED PVB FILM	EEA (tonnes)	%
Kuraray	[...]	[10-20]%
DuPont	[...]	[5-10]%
COMBINED	**[...]**	**[20-30]%**
Eastman	[...]	[40-50]%
Sekisui	[...]	[30-40]%
Total	[...]	100%

Source: Commission reconstruction on the basis of competitors' replies to the data request of Questionnaire Q2

52. Therefore, with respect to a potential separate market of coloured PVB film, the transaction does not raise serious doubts as to its compatibility with the internal market given the limited combined market shares of the Parties post-merger.

b) PVB film for automotive applications

53. As already explained in section "IV.B.1" of this Decision, PVB film is mainly used for architectural and for automotive applications.

54. In the potential market for PVB film for automotive applications the transaction would lead only to a limited combined market share in the EEA, according to the Notifying Party's estimations in the Form CO. In this potential product market the market leader is and would remain Sekisui, holding a market share of [50-60]% in the EEA, followed by Eastman with [30-40]%. The Commission's market reconstruction confirmed that in the automotive segment the Parties' combined market share would be in the range of [10-20]% in the EEA. Moreover, the Parties' market shares have remained at approximately the same level during the past three years.

Table 2: Reconstruction of market shares in PVB film for automotive applications

AUTOMOTIVE PVB FILM	EEA (tonnes)	%
Kuraray	[...]	[5-10]%
DuPont	[...]	[5-10]%
COMBINED	**[...]**	**[10-20]%**
Eastman	[...]	[30-40]%
Sekisui	[...]	[50-60]%
Others[32]		
Total	[...]	100%

Source: Commission reconstruction on the basis of competitors' replies to the data request of Questionnaire Q2

32 The volumes allocated to "others" in this table are based on the Notifying Party's estimation in the From CO and have not been reconstructed by the Commission.

55. Therefore, the Commission considers that with respect to a potential separate market of PVB film for automotive applications, the transaction does not raise serious doubts as to its compatibility with the internal market in that regard.

c) PVB film for architectural applications

i. *Competitive landscape*

56. In the market for PVB film for architectural applications, there are mainly three significant suppliers, namely Kuraray, GLSV and Eastman, since Sekisui has only limited activities in this segment. In the Form CO, the Notifying Party estimated that in 2013 the Parties' combined market shares in a PVB film market for architectural applications would be [60-70]% in volume ([50-60]% in value) in the EEA. Due to Sekisui's limited presence, the transaction would lead essentially to a duopoly between the merged entity and Eastman, creating the market leader. According to the Commission's market reconstruction, the merged entity would reach a market share of [50-60]% in the EEA. Moreover, the Parties' market shares have remained at approximately the same level during the past three years.

Table 3: Reconstruction of market shares in PVB film for architectural applications

ARCHITECTURAL PVB FILM	EEA (tonnes)	%
Kuraray	[...]	[40-50]%
GLSV	[...]	[10-20]%
COMBINED	**[...]**	**[50-60]%**
Eastman	[...]	[40-50]%
Sekisui	[...]	[5-10]%
Others[33]		
Total	[...]	100%

Source: Commission reconstruction on the basis of competitors' replies to the data request of Questionnaire Q2

57. Therefore, with respect to the potential PVB film market for architectural applications, the transaction would essentially lead to a "three to two" reduction of the number of suppliers in the EEA.

ii. *Closeness of competition*

58. Amongst the four main suppliers of PVB film, Eastman, Sekisui and GLSV have a global footprint, while Kuraray is mostly present in Europe with production facilities only in Germany and western Russia. Furthermore, while Eastman, Kuraray and GLSV have a strong position in the supply of PVB film for architectural applications, Sekisui focuses mainly on PVB film for automotive applications, where Kuraray and GLSV have a limited presence. Eastman is the only supplier who has an equally strong position in both architectural and automotive applications.

33 The volumes allocated to "others" in this table are based on the Notifying Party's estimation in the From CO and have not been reconstructed by the Commission.

59. According to competitors, reliability of supply, level of technical service, price and product quality (especially optical appearance) are the most important parameters of competition in the PVB film market.[34] According to customers, the most important competitive parameters for suppliers of PVB film are quality, price, consistency, reliability of supply, lead time and technical services.[35] Eastman is generally seen by customers as able to produce all grades of PVB film for all applications. Sekisui is considered to have limited ability and/or willingness to produce PVB film for architectural applications.[36]

60. In PVB film for architectural applications, although Kuraray and GLSV are seen as closest competitors to each other in terms of price, Eastman is considered closest to the Parties in terms all other parameters, such as quality, reliability and technical services. Specifically, competitors and customers considered that:[37]

- in terms of geographic coverage, Kuraray is disadvantaged; and

- in terms of quality/price ratio, Kuraray, Eastman and GLSV are seen by customers as offering good quality, whereas Sekisui is generally absent from the architectural segment.[38] Chinese/Taiwanese suppliers are seen as offering low prices but bad quality/consistency and low reliability.

61. It thus appears that in the potential PVB market for architectural applications, Kuraray, GLSV and Eastman would constitute the three main suppliers in close competition with each other.

iii. *Purchasing patterns*

62. The Notifying Party claims that most customers multi-source and regard two or three sources of supply as being sufficient to generate effective competition.

63. During the market investigation, competitors and customers indicated that there is direct negotiation of annual contracts on the basis of last year's prices with a given customer. Customers often approve suppliers by auditing and evaluating them every year, trying samples in their production lines, site visits, as well as vetting of a supplier's financial situation.[39] Therefore, it appears that although *de jure* customers are contractually free to change supplier every year, *de facto* switching to a new supplier is not immediately possible due to the validation procedure necessary for the trustworthiness of the customers' products.

64. Most customers multi-source in order to be able to readily switch volumes between their approved suppliers in case e.g. one of them charges too high prices. Almost all customers have at least two PVB film suppliers in a given year, while a significant majority has three or four

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34 Replies to Questionnaire Q2 – question 29.

35 Replies to Questionnaire Q1 – questions 50-51.

36 Replies to Questionnaire Q1 – questions 50-51.

37 Replies to Questionnaire Q2 – questions 31 and 33; Replies to Questionnaire Q1 – questions 53 and 60-61.

38 Customers stated that in negotiations they have often invoked one of the main suppliers, except Sekisui, as a threat to switch to an alternative supplier.

39 Replies to Questionnaire Q2 – questions 44-47; replies to Questionnaire Q1 – questions 70-73.

suppliers in a given year.[40] Thus, although the majority of customers do not regularly switch to new suppliers, they may shift volumes between their existing suppliers mainly for price reasons.[41]

65. Therefore, it is important for customers to be able to have a pool of existing suppliers from where they source, in order to be able to play them against each other in case of attempts of price increases by the suppliers. Hence, a reduction of the number of suppliers in that pool could contribute to making price increases and reduced customer choice in PVB film for architectural applications more likely, since that pool already pre-merger includes only three credible players.

iv. *Threat of Chinese/Taiwanese suppliers*

66. The Notifying Party claimed that, apart from Eastman and Sekisui, the merged entity would also face competition from emerging PVB film manufacturers located in China and Taiwan, such as CCPC, Kingboard and Decent, which are steadily gaining ground in Europe. According to the Notifying Party, each of the largest four glassmakers (NSG Pilkington, Saint-Gobain, Guardian and Asahi Glass Company) has at least tested Chinese or Taiwanese PVB film at their EEA or neighbouring facilities, with a view to homologating one or more of these suppliers. Other smaller customers in Italy, Romania, Poland and Greece are also allegedly using, or have recently used, PVB film supplied from China or Taiwan.

67. The information obtained by the Commission in the course of its market investigation did not support the Notifying Party's view. According to respondents, at this stage Chinese/Taiwanese suppliers do not have any noticeable presence in the EEA. Indeed, almost all customers stated that they do not purchase PVB film for architectural applications from any supplier other than the main four, that is Eastman, Sekisui and the Parties. Only a few customers have tested certain Chinese/Taiwanese suppliers (e.g. HJPM, Kingboard, CCPC) without however proceeding to making commercial purchases.

68. The main issue seems to be the lack of quality that would be acceptable for the EEA market. Specifically, amongst the few customers that claimed to be testing Chinese/Taiwanese suppliers: one customer stated that it tests HJPM, but with the aim of supplying Russia in 2014; another customer has qualifications of CCPC in progress, but with the aim of starting commercial purchases in 2014 in Asia; and another customer has tested Kingboard and CCPC, but is unlikely to use them in EEA operations and/or in the short term.[42] Furthermore, an EEA customer which according to the Parties purchases from Chinese/Taiwanese suppliers clarified that it does not purchase from such suppliers, since their product has worse clarity and strength.[43]

69. Moreover, according to customers, Chinese/Taiwanese suppliers have difficulties in handling the logistics of supplying PVB film from China to the EEA, they seem unable to provide high

[40] Replies to Questionnaire Q1 – question 74.

[41] Replies to Questionnaire Q1 – questions 75-77.

[42] Replies to Questionnaire Q1 – question 67.

[43] Replies to Questionnaire Q1 – questions 67-69.

volumes, they have limited product range (e.g. no jumbo), few of them use virgin PVB resin[44] and they lack reliability and consistency of supply.[45]

70. [Description of Chinese PVB products and suppliers].[46]

71. In view of the above, Chinese/Taiwanese suppliers of PVB film do not appear to be effective competitors pre-merger and thus would not be in a position to constrain the merged entity post-transaction in the supply of PVB film for architectural applications in the EEA.

v. *Buyer power*

72. According to the Notifying Party, demand for PVB film for architectural applications is driven downstream by the four leading flat glass manufacturers, ([…]), which account for more than half of total PVB film consumption.

73. Kuraray's 5 largest customers represent [70-80]% and its 10 largest customers represent [80-90]% of its total 2013 sales of PVB film for architectural applications, while GLSV's figures are even higher, i.e. [90-100]% and [90-100]% respectively.[47] Several of those large customers (e.g. [customer], [customer]) purchase PVB film for both architectural and automotive applications.

74. During the market investigation, competitors stated that negotiations are rather balanced and customers are able to discuss the contractual terms with suppliers of PVB film.[48] On the other hand, the majority of customers stated that they are price takers rather than price makers. Amongst the large customers only two explicitly admitted being price makers. Moreover, customers have generally shown their readiness to switch supplies between the three/four largest suppliers, but not to sponsor new entry or to self-manufacture PVB film.[49]

75. […]. In a presentation of December 2013, [Pricing structure and strategy with regard to certain customers].[50].[51]

76. In any event, it appears that negotiations between suppliers and customers are generally not transparent, which allows suppliers to differentiate their pricing amongst their customers according to the latter's negotiating power. In particular, during the market investigation competitors and customers indicated that there are direct negotiations of annual contracts on the basis of last year's prices with a given customer[52] and there are no sources (e.g. price lists) for customers to benchmark the offer they receive to offers made to other customers. Given the

44 As opposed to recycled PVB film.

45 Replies to Questionnaire Q1 – questions 67-69.

46 See sales reports [Name of presentation] submitted in response to the Commission's RFI of 13 March 2014.

47 Form CO, Table 108.

48 Replies to Questionnaire Q2 – questions 49-50.

49 Replies to Questionnaire Q1 – questions 78-79.

50 See presentation [Name of presentation] submitted in response to the Commission's RFI of 13 March 2014, slide 8.

51 See presentation [Name of presentation] submitted in response to the Commission's RFI of 13 March 2014, slide 9.

52 Replies to Questionnaire Q2 – questions 44-47; replies to Questionnaire Q1 – questions 70-73.

suppliers' possibility to price discriminate, even if one were to accept that large customers have buyer power that could counteract the merged entity's attempts to increase prices, such buyer power would not prevent price increases to the remaining smaller customers. In fact, evidence submitted by the Notifying Party shows that the largest customers do not always get the best prices from the Parties – although this could be explained by different product mixes.

77. In view of the above, although the Commission recognises that there may be a certain degree of buyer power in the hands of large customers of PVB film for architectural applications, it is doubtful that such buyer power can, on its own, prevent price increases and the deterioration of competitive conditions in the supply of PVB film for architectural applications in the EEA, where customers already face significant consolidation of their suppliers.

vi. *Entry and expansion*

78. The Notifying Party is of the view that there are no legal or regulatory barriers to entry and that no IP rights pose any barriers to entry. According to the Form CO, the total cost of establishing a greenfield PVB film manufacturing operation (including R&D, marketing and logistics) would be approximately EUR […]. The Notifying Party estimates that an investment at this level would be sufficient to develop capacity enabling the new entrant to gain an EEA market share of at least […].

79. However, the information obtained by the Commission in its market investigation indicated the existence of high barriers to entry, residing in the know-how (not in the sense of any IP rights, but in the sense of acquired expertise), followed by high capital expenditure compared to the value of the market.[53] None of the responding competitors and customers was aware of any new entrant in the EEA in the past 3 years, nor did they expect any specific entry in the near future.[54]

80. The Commission also explored the ability and incentives of Sekisui to expand its presence in the supply of PVB film for architectural applications post-merger. Sekisui has a significant presence in the market for the production of PVB film for automotive applications which has been its focus historically, as analysed in section "IV.B.3.b)" of the present Decision. However, its position on the market for PVB film for architectural applications is limited. Sekisui explained that this is due to several factors, one of them is lack of expertise in this sector and the other is related to its strategy to focus on automotive segment. While Sekisui has jumbo capacity in its facility in the Netherlands, so far it has been using it to supply the automotive market by cutting the rolls into narrower pieces.[55]

81. Sekisui considers that the main barriers to its expansion in the production of PVB film for architectural applications are: (i) its lack of know-how and expertise in this field, (ii) its current capacity constraints and the associated costs of expanding that capacity, and (iii) the lower profit margins in architectural PVB film as compared to automotive PVB film (due to the product mix and higher added value of automotive applications). In addition, should the

53 Replies to Questionnaire Q2 – questions 51-52; replies to Questionnaire Q1 – questions 80-81.

54 Replies to Questionnaire Q2 – questions 53-54; replies to Questionnaire Q1 – questions 82-83.

55 Agreed non-confidential minutes of 20 March 2014 between the Commission and Sekisui, paras 2-4.

proposed merger take place, the position of the merged entity would be an extra hurdle to overcome in order for Sekisui to prove itself in the architectural PVB film market.[56]

82. Finally, Sekisui is concerned by the recent market developments in the building sector which, in combination with Sekisui's already low market share in the supply of PVB film for architectural applications and the drop in EEA demand (approx. 20-25%) on the building market, decrease its appetite for expansion. Sekisui therefore maintains that is unlikely to expand its presence in architectural PVB film as long as EEA demand on the building market does not pick up.[57]

83. In view of the above, the Commission considers that there is no prospect of a timely and sufficient entry/expansion that could counteract attempts by the merged entity to increase prices post-merger in the supply of PVB film for architectural applications in the EEA.

vii. *Conclusion*

84. As regards a potential PVB film market for architectural applications, the transaction would essentially lead to a "three to two" reduction of the number of suppliers in the EEA. Given the Parties' strong positions in the EEA, non-coordinated effects post-merger would be particularly likely in that region. Therefore, with respect to a potential separate PVB film market for architectural applications, the Commission considers that transaction raises serious doubts as to its compatibility with the internal market.

d) PVB film for all applications

i. Competitive landscape

85. In the Form CO, the Notifying Party estimated that in 2013 the Parties' combined market shares on an overall PVB film market would be [40-50]% in volume ([40-50]% in value) in the EEA. However, the Commission's market reconstruction revealed that the Notifying Party had overestimated the Parties' market shares. On this basis, the merged entity would reach a market share of [30-40]% in the EEA. Moreover, the Parties' market shares have remained at approximately the same level during the past three years.

Table 4: Reconstruction of market shares in PVB film overall

ALL PVB FILM	EEA (tonnes)	%
Kuraray	[...]	[20-30]%
GLSV	[...]	[10-20]%
COMBINED	**[...]**	**[30-40]%**
Eastman	[...]	[40-50]%
Sekisui	[...]	[20-30]%
Others[58]		
Total	[...]	100%

Source: Commission reconstruction on the basis of competitors' replies to the data request of Questionnaire Q2

56 Agreed non-confidential minutes of 20 March 2014 between the Commission and Sekisui, paras 6 and 16.

57 Agreed non-confidential minutes of 20 March 2014 between the Commission and Sekisui, para. 11.

58 The volumes allocated to "others" in this table are based on the Notifying Party's estimation in the From CO and have not been reconstructed by the Commission.

86. As shown in the above table, with respect to the overall PVB film market, the transaction would lead to a "four to three" reduction of the number of suppliers in the EEA, creating the new number two supplier.

ii. Closeness of competition

87. The Parties are particularly close competitors due to their strong focus on the segment of PVB film for *architectural* applications in the *EEA*, as analysed in sections "I.A.1.a)i" and "I.A.1.a)ii" of the present Decision.

88. In particular, in terms of product coverage, Eastman is generally seen by customers as able to produce all grades of PVB film for all applications. Kuraray and GLSV are considered particularly strong in the supply of PVB firm for architectural applications, whereas Sekisui is considered to have limited ability and/or willingness to produce PVB film for architectural applications.[59]

89. In view of the analysis in the present section as well as in section "I.A.1.a)ii" of the present Decision, it appears that in a PVB market for all applications Kuraray, GLSV and Eastman would constitute the closest competitors to each other due to their strong presence in architectural applications, as opposed to Sekisui.

iii. Purchasing patterns

90. In the light of the analysis in section "I.A.1.a)iii" of the present Decision, it is important for customers to be able to have a pool of existing suppliers from where they source, in order to be able to face in a flexible manner attempts of price increases by their suppliers. A reduction of the number of possible suppliers in that pool from four to three could contribute to making price increases and reduced customer choice in PVB film more likely.

iv. Threat of Chinese/Taiwanese suppliers

91. In the light of the analysis in section "I.A.1.a)iv" of the present Decision, Chinese/Taiwanese suppliers of PVB film do not appear to be effective competitors pre-merger and thus would not be in a position to constrain the merged entity post-transaction in the supply of PVB film in the EEA.

v. Buyer power

92. As explained in recital 32, pricing in the two segments of PVB film (that is, automotive and architectural applications) is fairly independent. Participants in the market investigation have pointed out that, although producers and customers typically enter into contracts covering all products, prices are discussed product by product. The investigation did not reveal any evidence of customers being able to use their strong bargaining position in one segment as leverage to achieve better prices in the other segment.

93. In the light of the analysis in recital 92 as well as in section "I.A.1.a)v" of the present Decision, although the Commission recognises that large customers of PVB film have a certain degree

[59] Replies to Questionnaire Q1 – questions 50-51.

of buyer power , it is doubtful that such buyer power can, on its own, prevent price increases and the deterioration of competitive conditions in the supply of PVB film.

vi. Entry and expansion

94. In the light of the analysis in section "I.A.1.a)vi" of the present Decision, the Commission considers that there is no prospect of a timely, likely and sufficient entry/expansion that could counteract attempts by the merged entity to increase prices post-merger in the supply of PVB film.

vii. Conclusion

95. With respect to a potential PVB film market for all applications, the transaction would essentially lead to a "four to three" reduction of the number of suppliers in the EEA. The transaction would bring together two close competitors with strong focus on the segment of PVB film for architectural applications, while Sekisui would exercise at best only a remote competitive constraint to the merged entity. Furthermore, the transaction would bring together two competitors with particularly strong positions in the EEA. Thus, the transaction is likely to lead to non-coordinated effects in an overall market for PVB film. Consequently, with regard to a potential PVB film market for all applications in the EEA, the Commission considers that the transaction raises serious doubts as to its compatibility with the internal market.

e) Recycled PVB film

96. For the sake of completeness, the Commission has also considered the effects of the proposed transaction on a potential market for the supply of recycled PVB film.

97. According to the Notifying Party, virgin PVB film and recycled PVB film are functionally almost identical and have almost the same applications, except that recycled film is not typically used in high-end applications.

98. The market investigation showed that recycled PVB film is used to a limited extent by customers, mainly in segments where quality is less important, such as aftermarkets of automotive applications (e.g. replacement windshields). In 2012 the sales of recycled PVB film for automotive and architectural applications in the EEA were approximately EUR […], i.e. only […]% of the overall EEA PVB market of EUR […].

99. Although currently only Kuraray and GLSV produce recycled PVB film in the EEA, the barriers to entry appear low, if any. As a way of example, a customer stated that it produces its own recycled PVB film for automotive applications based on its PVB trims collection.[60] Therefore, it appears that in case the merged entity were to attempt to increase prices of recycled PVB film, competitors such as Sekisui and Eastman could enter that potential market. Moreover, customers (especially the large ones that account for the vast majority of the Parties' sales) could produce themselves recycled PVB film for the limited applications that they use it, thus rendering unprofitable any attempt to increase prices by the merged entity.

60 Replies to Questionnaire Q1 – question 17.

100. According to the Parties' sales data at table 5 of the Form CO, recycled PVB film is on average only [5-10]% less expensive than virgin PVB film. Thus, a price increase by the merged entity is unlikely to be profitable, as it would essentially lead customers to switch to virgin PVB film.

101. In view of the above, with respect to a potential separate market for recycled PVB film, the transaction would not raise serious doubts as to its compatibility with the internal market.

4. Conclusion

102. In view of the above, the Commission concludes that the transaction raises serious doubts as to its compatibility with the internal market in the following potential markets: (i) the supply of PVB film for all applications in the EEA; and (ii) the supply of PVB film for architectural applications in the EEA.

V. VERTICALLY AFFECTED MARKETS

103. The proposed transaction also gives rise to vertically affected markets between (i) VAM and PVA, and (ii) PVA and PVB resin.

A. Vertical links between VAM (upstream) and PVA (downstream)

1. VAM

a) Product market definition

104. VAM is a commodity chemical derived from acetic acid which takes the form of a colourless liquid, most commonly produced by the addition of acetic acid to ethylene. 70-80% of global VAM production is used in the manufacturing of PVA. In 2012, sales of VAM amounted to EUR […] worldwide and EUR […] in the EEA.

105. The Commission has previously considered that VAM constitutes a single relevant product market.[61] The Notifying Party agrees with the Commission's approach.

106. In any event, the precise product market definition regarding VAM can ultimately be left open, as the outcome of the competitive assessment in the present case would not change under any plausible market definition.

b) Geographic market definition

107. The Commission has previously considered that VAM constitutes a single relevant product market, global in scope.[62]

108. The Notifying Party agrees with the Commission view and submits that international trade flows have increased in the last years and imports now represent over one third of EEA VAM consumption.

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61 See Commission decision in case COMP/M.3625 *Blackstone / Acetex* (2005), paragraph 20.

62 See Commission decision in case COMP/M.3625 *Blackstone / Acetex* (2005), paragraph 20.

109. In any event, the precise geographic market definition regarding VAM can ultimately be left open, as the outcome of the competitive assessment in the present case would not change under any plausible market definition.

2. PVA

a) Product market definition

110. As analysed in section "IV.A.1", the precise product market definition regarding PVA can ultimately be left open, as the outcome of the competitive assessment in the present case would not change under any other plausible market definition.

b) Geographic market definition

111. As analysed in section "IV.A.2", the precise geographic market definition regarding PVA can ultimately be left open, as the competitive assessment in the present case would not change under any plausible market definition.

3. Competitive assessment of vertical links between VAM and PVA

112. The concentration would give rise to vertical links between the upstream market for VAM and the downstream market for PVA. The Parties' combined market shares on the PVA market are [30-40]% in volume ([30-40]% in value) in the EEA and [10-20]% in volume ([20-30]% in value) worldwide.

113. Any input foreclosure is unlikely in light of the Parties' small market shares on the VAM market worldwide (GSLV [5-10]%, Kuraray [0-5]%) and in the EEA (GSLV [0-5]%, Kuraray [0-5]%). Customer foreclosure would also be very unlikely since Kuraray's production of VAM is […], while GSLV's share on the PVA market is [0-5]% worldwide and [0-5]% in the EEA. As a result, under any plausible market definition, input or customer foreclosure is unlikely with regard to the VAM and PVA markets.

114. Consequently, the Commission considers that as regards the vertical links between VAM and PVA the transaction does not raise serious doubts as to its compatibility with the internal market

B. Vertical links between PVA (upstream) and PVB resin for technical applications (downstream)

1. PVA

a) Product market definition

115. As analysed in section "IV.A.1", the precise product market definition regarding PVA can ultimately be left open, as the outcome of the competitive assessment would not change under any plausible market definition.

b) Geographic market definition

116. As analysed in section "IV.A.2", the precise geographic market definition regarding PVA can ultimately be left open, as the outcome of the competitive assessment would not change under any plausible market definition.

2. PVB resin for technical applications

a) <u>Product market definition</u>

117. PVB resin is a polyvinyl acetal. The Notifying Party submits that PVB resin can be divided into film and non-film (technical) grades. Film grades are used to manufacture PVB film used as interlayers in laminate safety glass (hereinafter "PVB resin for film"), while non-film grades of PVB resin are used for various technical applications (hereinafter "PVB resin for technical applications").

118. According to data provided by the Parties, there is no merchant market for PVB resin for film in the EEA,[63] as the whole production of PVB resin for film is consumed captively by vertically integrated producers of PVB film, such as Kuraray and GLSV. Thus, the present Decision analyses only the vertical relations between PVA and PVB resin for technical applications.

119. The market for PVB resin for technical applications is a small, specialised market, with total demand amounting to only EUR […] globally and EUR […] in the EEA. Technical applications include paints, inks, lacquers, adhesives, removable coatings and ceramics.

120. The Commission did not define the relevant product market for PVB resin in any of its previous decisions.

121. However, the precise product market definition regarding PVB resin for technical applications can ultimately be left open, as the outcome of the competitive assessment would not change under any plausible market definition.

b) <u>Geographic market definition</u>

122. The Commission did not define the relevant geographic market for PVB resin in any of its previous decisions.

123. The Notifying Party submits that the market for PVB resin for technical applications is at least EEA-wide in scope, if not worldwide, due to the arguably low transport costs stemming from the fact that PVB resin is a powder that can be shipped and stored without any difficulty.

124. However, the precise geographic market definition regarding PVB resin for technical applications can ultimately be left open, as the outcome of the competitive assessment would not change under any plausible market definition.

3. Competitive assessment of vertical links between PVA and PVB resin for technical applications

125. The transaction would give rise to vertical links between the upstream market for PVA and the downstream market for PVB resin for technical applications. On the latter market, Kuraray has significant market shares ([30-40]% worldwide and [70-80]% in the EEA). GLSV is not present in this market as it does not produce this type of PVB resin. The Parties' combined

[63] At a worldwide level, [Details of PVB resin sales by region].

market shares on the PVA market are [30-40]% in volume ([30-40]% in value) in the EEA and [10-20]% in volume ([20-30]% in value) worldwide.

126. Kuraray produces PVB resin for technical applications at its plant in Frankfurt, Germany, which has annual capacity of […] tonnes for technical grades and supplies it to the merchant market, of which […] tonnes are sold in the EEA. Overall demand for PVB resin for technical applications is also very small at […] tonnes per annum ([...] tonnes in the EEA) – this reflects […] of global PVB resin capacity.

127. In addition, input foreclosure can be excluded, since Kuraray is vertically integrated upstream in the production of PVA and, in any event, GLSV has only [0-5]% of the EEA PVA market. Both Eastman and Sekisui also produce PVA. Kuraray is not vertically integrated downstream of PVB resin for technical applications, i.e. **it** does not manufacture any finished or intermediate products that incorporate such resin. Neither does GLSV.

128. As regards input foreclosure, as explained in recital 21, the market investigation confirmed that there is a sufficient number of PVA producers able to produce the PVA grades required for PVB resin for technical applications. As regards customer foreclosure, any risks can be excluded given the very small size of the market for PVB resin for technical applications relative to that of the market for PVA.

129. Consequently, the Commission considers that the transaction does not raise serious doubts as to its compatibility with the internal market regarding the vertically affected markets in relation to PVA and PVB resin.

VI. PROPOSED REMEDIES

A. Description of the proposed commitments

130. In order to render the concentration compatible with the internal market, the Notifying Party has modified the notified concentration by submitting commitments (the "Commitments")[64], which are annexed to this Decision and form an integral part thereof.

131. In particular, pursuant to the Commitments, Kuraray committed to divest the GLSV's PVB film manufacturing facility in Uentrop, Germany, as well as all associated technical, sales and customer support personnel (the "Divestment Business") to an independent third party.

132. The Divestment Business consists of three elements, which essentially represent GLSV's production and sales of PVB film for architectural customers in Europe, the Middle East and Africa (the "EMEA" region), namely:

   a) **GLSV's PVB film manufacturing facility in Uentrop**: this is the primary component of the Divestment Business. It produces PVB film on […] and currently has an annual capacity of […] tonnes. [Details of potential investment plans]. The facility has the capacity to produce film for both architectural and automotive applications in all standard grades and thicknesses, including both jumbo size film (314 cm wide) and smaller (non-jumbo) film. Currently, the facility focuses on the

[64] The Notifying Party submitted a first set of commitments on 3 April 2014. In the light of the results of the market test, the Notifying Party implemented specific improvements in the second and final version of the proposed commitments, which was submitted on 15 April 2014.

manufacture of film for architectural applications, which consistently accounts for around [70-80]% of its output. In principle, all personnel in Uentrop will be transferred to the purchaser of the Divestment Business and all production know-how will remain with the Divestment Business.

b) **Associated EMEA sales, customer service, technical and R&D support functions**: in addition, the Divestment Business will include a long-term lease agreement for GLSV's facility in Mechelen, Belgium, which houses a customer service group, a supply chain team and an R&D/technical service lab, together with all personnel that are necessary to ensure the continuation and development of the Divestment Business' operations. The Divestment Business will also include a transfer of all other personnel currently employed in sales, customer service and technical support functions in relation to the Divestment Business

c) **A long-term supply agreement for PVB resin on a cost-plus basis**: at present, the Divestment Business is supplied with PVB resin internally by GLSV from its PVB resin plants in the USA. In order to ensure the continuous and uninterrupted operation of the Divestment Business, the purchaser will be granted the option of entering into a supply agreement with Kuraray for the same PVB resin post-divestiture. Kuraray undertakes to supply the Divestment Business with PVB resin on cost-plus terms for an initial period of 3 years (renewable for up to two further one-year terms) and will guarantee that the specifications of such resin will be the same as that currently used at the Divestment Business.

d) **Licences including the "Butacite" trademark:** licences to all intangible assets that are used in the operation of the Divestment Business and all other IP and know-how that the Divestment Business uses in its production and marketing of PVB film.

e) **A contract for interleaving and warehousing services:** an assignment of GLSV's contract with the third party that operates an interleaving facility and warehousing facility for GLSV in Venlo (the Netherlands).

133. In addition, the Notifying Party has entered into related commitments, *inter alia* regarding the separation of the Divestment Business from the retained businesses, the preservation of the viability, marketability and competitiveness of the Divestment Business, including the appointment of a monitoring trustee and, if necessary, a divestiture trustee.

B. The Commission's assessment of the Commitments

1. Framework for the Commission's assessment of the Commitments

134. Where 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.

135. As set out in the Commission Notice on Remedies[65], commitments have to eliminate the Commission's serious doubts entirely, they have to be comprehensive and effective from all points of view and they must be capable of being implemented effectively within a short period of time, as the conditions of competition on the market will not be maintained until the commitments have been fulfilled.[66]

136. In assessing whether or not commitments will restore effective competition, the Commission considers their type, scale and scope by 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.[67]

137. Divestiture commitments are the best way to eliminate serious doubts resulting from horizontal overlaps of the merging parties' activities.[68] Other commitments (such as licensing) may be suitable to resolve serious doubts if those commitments are equivalent to divestitures in their effects. The divested activities must consist of a viable business that, if operated by a suitable purchaser, can compete effectively with the merged entity on a lasting basis and that is divested as a going concern.[69]

138. The business to be divested must include all the assets which contribute to its current operation or which are necessary to ensure its viability and competitiveness and all personnel which are currently employed or which are necessary to ensure the business' viability and competitiveness. Personnel and assets which are currently shared between the business to be divested and other businesses of the parties, but which contribute to the operation of the business or which are necessary to ensure its viability and competitiveness, must also be included. Otherwise, the viability and competitiveness of the business to be divested would be endangered. Therefore, the business to be divested must contain the personnel providing essential functions for the business, at least in a sufficient proportion to meet the on-going needs of the business to be divested.[70]

139. Furthermore, the intended effect of the divestiture will only be achieved if and once the business is transferred to a suitable purchaser with proven relevant expertise and ability to maintain and develop the business to be divested as a viable and active competitive undertaking.

2. The Commission's market test and assessment of the Commitments

a) The results of the market test

140. The Commission launched a market test of the Commitments on 4 April 2014. Overall, the market test was positive as to the scope and suitability of the Commitments to remedy the

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65 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").

66 Commission Notice on Remedies, paragraph 9.

67 Commission Notice on Remedies, paragraph 12.

68 Commission Notice on Remedies, paragraph 17.

69 Commission Notice on Remedies, paragraph 23.

70 Commission Notice on Remedies, paragraphs 25 and 26.

serious doubts identified by the Commission as to the compatibility of the transaction with the internal market. However, the market test identified specific elements of the Commitments that were subsequently improved by the second and final version of the Commitments submitted on 15 April 2014.

141. Competitors and customers generally considered that the Divestment Business includes all necessary assets and would be able to compete effectively with the merged entity. However, certain respondents called for caution in relation to the transitional agreement for the supply of PVB resin (the main input for the production of PVB film). Some respondents stated that the 3-year duration of the agreement may not be sufficient for the Divestment Business to start producing PVB resin or to establish a credible supply relationship with a producer of PVB resin. Furthermore, given that PVB resin represents a substantial amount of the production cost of PVB film, the pricing of the supply agreement will be key for the competitiveness of the purchaser of the Divestment Business. The "cost plus" price provided for in the Commitments was considered difficult to determine in view of the lack of an industry reference and could thus be arbitrary.

142. The Notifying Party agreed to address the issues expressed during the market test and on 15 April 2014 submitted a revised version of the Commitments (i) extending the duration of the agreement from three years to three years renewable for up to two further one-year terms, and (ii) involving an independent expert (whose appointment will be agreed with the Monitoring Trustee) in the determination of a fair and competitive "cost plus" price.

b) Suitability of the Commitments to remove the serious doubts

143. The Commitments, consisting in the divestiture of a production facility and associated assets, constitute a structural measure. In fact, the sale of the Divestment Business to an independent and suitable purchaser will dissipate the serious doubts identified by the Commission as to the compatibility of the transaction with the internal market and will not require medium or long-term monitoring measures. The new commercial structure resulting from the implementation of the Commitments will be sufficiently workable and lasting to ensure that a significant impediment to effective competition will not materialise.[71]

144. The Divestment Business has accounted for [80-90]% of the GLSV's EEA sales of PVB film for architectural applications in each of the last five years. In 2013, [90-100]% of the PVB film for architectural applications that GLSV sold in the EEA was manufactured in Uentrop. As such, the Divestment Business accounts for virtually all of the Divestment Business' EEA sales of PVB film for architectural applications. [GLSV sales by facility].

i. PVB film for architectural applications

145. In particular, assuming that the Divestment Business would continue to produce PVB film for architectural and automotive applications at the same ratio ([…]) as today, the post-remedies market shares for the supply of PVB film for *architectural* applications in the EEA would change as follows:

71 See also Commission Notice on Remedies, paragraphs 10 and 15.

Table 5: Reconstruction of market shares in PVB film for architectural applications post-merger, with and without the remedies

SALES 2013 - CURRENT MARKET SHARES

ARCHITECTURAL PVB FILM	EEA %
Kuraray	[40-50]%
DuPont	[10-20]%
COMBINED	**[50-60]%**
Eastman	[40-50]%
Sekisui	[0-5]%
Others[72]	0%
Total	100%

SALES 2013 - POST-REMEDIES MARKET SHARES

ARCHITECTURAL PVB FILM	EEA %
Kuraray	[40-50]%
DuPont	<1%
COMBINED	**[40-50]%**
Eastman	[40-50]%
Sekisui	[0-5]%
Buyer	[10-20]%
Others[73]	0%
Total	100%

Source: Commission reconstruction on the basis of competitors' replies to the data request of Questionnaire Q2

146. Therefore, the Commitments would remove virtually all the increment that would have been added by the transaction in a potential market of PVB film for *architectural* applications in the *EEA*. Specifically, the increment would be reduced from [10-20]% to less than 1% post-remedies. In parallel, the Commitments would lead to the creation of a new significant player with approximately [10-20]% market share in such a market.

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72 The volumes allocated to "others" in this table are based on the Notifying Party's estimation in the From CO and have not been reconstructed by the Commission.

73 The volumes allocated to "others" in this table are based on the Notifying Party's estimation in the From CO and have not been reconstructed by the Commission.

ii. PVB film for all applications

147. Furthermore, assuming that the Divestment Business would continue to produce PVB film for architectural and automotive applications at the same ratio ([…]) as today, the post-remedies market shares for the supply of *all* PVB film in the EEA would change as follows:

Table 6: Reconstruction of market shares in PVB film post-merger, with and without the remedies

SALES 2013 – CURRENT MARKET SHARES

ALL PVB FILM	EEA %
Kuraray	[20-30]%
DuPont	[10-20]%
COMBINED	**[30-40]%**
Eastman	[30-40]%
Sekisui	[20-30]%
Others[74]	0%
Total	100%

SALES 2013 – POST-REMEDIES MARKET SHARES

ALL PVB FILM	EEA %	
Kuraray	[20-30]%	
DuPont	[0-5]%	
COMBINED	**[20-30]%**	
Eastman	[30-40]%	
Sekisui	[20-30]%	
Buyer	[5-10]%	
Others[75]	0%	
Total	100%	100%

Source: Commission reconstruction on the basis of competitors' replies to the data request of Questionnaire Q2

148. Therefore, the Commitments would remove almost the entirety of the increment that would have been added by the transaction in a potential market for *all* PVB film in the *EEA*. Specifically, the increment would be reduced from [10-20]% to approximately [0-5]% in such a potential market post-remedies. In parallel, the Commitments would lead to the creation of a new significant player with approximately [5-10]% market share in such a market.

74 The volumes allocated to "others" in this table are based on the Notifying Party's estimation in the From CO and have not been reconstructed by the Commission.

75 The volumes allocated to "others" in this table are based on the Notifying Party's estimation in the From CO and have not been reconstructed by the Commission.

iii. Production capabilities of the Divestment Business

149. Overall, the Divestment Business is able to produce all standard grades of PVB film in all of the most widely-purchased thicknesses and widths. It can also produce coloured PVB film but does not produce acoustic or embossed films. Based on the existing product mix the Divestment Business could serve the market in virtually the same way as GLSV does today. In addition, the purchaser of the Divestment Business could introduce further capabilities, for instance to manufacture shadeband, embossed film and/or acoustic film at Uentrop.[76] [Details of potential investment plans].

c) Transitional supply agreement for PVB resin

150. The current specifications for PVB film produced by the Divestment Business require PVB resin manufactured by GLSV at Washington Works or Fayetteville in the USA, and switching to other sources of PVB resin may require a short transition period. Some technical work would be required in order to transition the Divestment Business to a different type of PVB resin from a different source. For example, the PVB film recipe would need to be reformulated to ensure that the final PVB film product maintains similar physical properties. In addition, the quantities of other inputs for PVB resin, e.g. plasticiser and additives, would need to be adjusted to ensure replication of the PVB film currently produced in Uentrop. The Notifying Party submitted that the technical effort required is relatively limited, such that the purchaser could transition Uentrop to a new source of PVB resin within 1-3 years. This could be achieved in a number of ways including:

a) in the case of a purchaser that manufactures PVB resin, either by transitioning the Divestment Business to use the purchaser's current PVB resin or by developing a new PVB resin using the purchaser's existing capabilities; or

b) in the case of a purchaser that does not manufacture PVB resin, by sourcing supply of suitable resin from a third party, for example from Eastman, Sekisui, Sinopec/Wuhan or any other Asian PVB resin manufacturer.

151. In any event, Kuraray has committed to enter into a transitional supply agreement with the purchaser of the Divestment Business for the same PVB resin that is currently used in Uentrop, in order to ensure the continuous and uninterrupted operation of the Divestment Business. Kuraray undertakes to supply the Divestment Business with PVB resin on cost-plus terms for an initial period of 3 years (renewable for up to two further one-year terms) and will guarantee that the specifications of such resin will be the same as that currently used at the Divestment Business.

d) Viability of the Divestment Business

152. The Divestment Business is profitable. It generated revenues from sales of PVB film of EUR […] million in 2012 and EUR […] million in 2013. [Details of potential investment plans]. This investment will generate an estimated return of USD […] million (net present value). According to financial projections submitted by the Notifying Party, revenue is forecasted to

[76] However, these types of film are exclusively (shadeband, embossed) or primarily (acoustic) aimed at the automotive segment and would not be necessary to continue competing effectively for architectural business.

increase by […]% from 2013 to 2016 and gross margins to increase by […]% over the same period. EBITDA is projected to grow by […]% between 2013 and 2016.

e) Purchaser criteria and potential buyers

153. The market test revealed several different categories of potential purchasers, including: (i) companies active in the production of PVA seeking to vertically integrate downstream; (ii) companies with manufacturing capabilities for PVB resin or PVB film; and (iii) private equity investors with some chemical industry experience.

154. Generally, both competitors and customers stated that the potential purchaser does not need to be already active in the supply of PVB film, but it could be active in one of the upstream markets (e.g. VAM, PVA), in the supply of neighbouring chemical products, or could even be a private equity investor. Several respondents, however, stated that it would be preferable that the buyer is integrated upstream, with the capacity to produce PVB resin, since, as explained in recital 141, PVB resin is key to the long term competitiveness of the purchaser.

155. Specifically, the market test revealed […] interested buyers, namely […] companies active in the PVB film supply chain and […] private equity investors.

C. Conclusion on the Commitments

156. On the basis of the above, the Commission concludes that the Commitments are suitable and sufficient to remedy the serious doubts raised by the transaction in the potential markets for: (i) the supply of PVB film for all applications in the EEA; and (ii) the supply of PVB film for architectural applications in the EEA. Moreover, the Commitments are comprehensive and effective from all points of view, and are capable of being implemented effectively within a short period of time.

157. The Commitments remove almost entirely the increment that would have been added by the transaction in the potential markets for the supply of PVB film for architectural applications in the EEA and for the supply of PVB film for all applications in the EEA.

158. Finally, the Commitments will also create an important competitor in the supply of PVB film with a particularly strong position in architectural applications in the EEA, [Details of potential investment plans], and react to any market changes.

VII. CONDITIONS AND OBLIGATIONS

159. Pursuant to 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.

160. The achievement of the measure 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 no longer stands. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with Article

8(6)(b) 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.

161. In accordance with the basic distinction between conditions and obligations, the decision in this case is conditional on full compliance with the requirements set out in Section B of the final Commitments, which constitute conditions. The remaining requirements set out in the other Sections of the said Commitments are considered to constitute obligations.

162. The full text of the final Commitments is annexed to this Decision as Annex I and forms an integral part thereof.

VIII. CONCLUSION

163. 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 this 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.

For the Commission

signed)
Joaquín ALMUNIA
Vice-President

15/04/2014

Case M. 7115 – Kuraray/GLSV Business

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Article 6(2) of Council Regulation (EC) No 139/2004 (the "***Merger Regulation***"), Kuraray Co., Ltd. (the "***Notifying Party***") hereby enters into the following Commitments (the "***Commitments***") vis-à-vis the European Commission (the "***Commission***") with a view to rendering its acquisition of assets that form part of the Glass Laminating Solutions/Vinyls Business (the "***GLSV Business***") of E. I. du Pont de Nemours and Company ("***DuPont***") (the "***Concentration***") compatible with the internal 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 purpose of the Commitments, the following terms shall have the following meaning:

   Affiliated Undertakings: undertakings controlled by the Parties and/or by the ultimate parents of the Parties, 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 contribute to the current operation or 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 more in detail in the Schedule.

   Closing: the transfer of the legal title to the Divestment Business to the Purchaser.

   Closing Period: the period of 3 months from the approval of the Purchaser and the terms of sale by the Commission.

   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 the Notifying Party commits to divest, consisting of the entire GLSV Business in the EMEA region with the exception of (i) the GLSV Business' PVB film recycling facility in Holesov (Czech Republic) and all personnel, intellectual property, customer contracts or goodwill specific to the manufacture and sale of recycled PVB film from such facility, (ii) any personnel, intellectual property, customer contracts or goodwill in relation to the SentryGlas product and (iii) any personnel, intellectual property, customer contracts and goodwill in relation to the PVA or VAM products. For the avoidance of doubt, the Divestment Business does not include any tangible or intangible assets or personnel outside of the EMEA region.

Divestiture Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by Kuraray and who has/have received from Kuraray 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.

EMEA: The countries of Europe, the Middle East and Africa.

First Divestiture Period: the period of […] from the Effective Date.

Hold Separate Manager: the person appointed by Kuraray 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.

Kuraray: Kuraray Co., Ltd., incorporated under the laws of Japan, with its registered office at 1621, Sakazu, Kurashiki City, Okayama Prefecture, Japan and registered with the Commercial/Company Register at Okayama Legal Affairs Bureau under number 2600-01-013156.

Mechelen Facility: the GLSV Business' R&D/technical service laboratory and customer service/technical support facility located at Antoon Spinoystraat 6, Mechelen 2800, Belgium.

Monitoring Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by Kuraray, and who has/have the duty to monitor Kuraray's compliance with the conditions and obligations attached to the Decision.

Parties: the Notifying Party and the undertaking that is the target of the concentration.

Personnel: all staff currently employed by the Divestment Business, including staff seconded to the Divestment Business, shared personnel as well as the additional personnel listed in the Schedule.

Primary Acquisition Effective Date: […], being the date upon which Kuraray formally obtains legal title to the GLSV Business pursuant to the ASPA between Kuraray and DuPont dated […].

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.

PVA: Polyvinyl Alcohol.

PVB: Polyvinyl Butyral.

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.

Uentrop Facility: the GLSV Business' PVB film manufacturing facility in Uentrop, located at Frielinghauser Straße 5, 59071 Hamm, Germany.

VAM: Vinyl Acetate Monomer.

Section B. The commitment to divest and the Divestment Business

Commitment to divest

2. In order to maintain effective competition, Kuraray 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, Kuraray 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 Kuraray has not entered into such an agreement at the end of the First Divestiture Period, Kuraray 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. Kuraray shall be deemed to have complied with this commitment if:

   (a) by the end of the Trustee Divestiture Period, Kuraray or the Divestiture Trustee has 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, the Notifying Party 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 the Notifying Party 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.

<u>Structure and definition of the Divestment Business</u>

5. The Divestment Business consists of the entire GLSV Business in the EMEA region with the exception of (i) the GLSV Business' PVB film recycling facility in Holesov (Czech Republic) and all personnel, intellectual property, customer contracts or goodwill specific to the manufacture and sale of recycled PVB film from such facility, (ii) any personnel, intellectual property, customer contracts or goodwill in relation to the SentryGlas product and (iii) any personnel, intellectual property, customer contracts and goodwill in relation to the PVA or VAM products. For the avoidance of doubt, the Divestment Business does not include any tangible or intangible assets or personnel outside of the EMEA region. Specifically, the Divestment Business shall include the following:

(a) All tangible assets that comprise the Uentrop Facility including its jumbo PVB film extrusion line with current capacity of […] MT per annum;

(b) All employees at the Uentrop Facility;

(c) Licenses to all intangible assets that are used in the operation of the Divestment Business, including the "Butacite" trademark and all other IP and know-how that the Divestment Business uses in its production and marketing of PVB film, under terms described in the Schedules;

(d) At the purchaser's option, an agreement under which Kuraray will supply PVB resin to the Uentrop Facility of the same specification as currently supplied by the GLSV Business for consumption at the Uentrop Facility, in such amounts as the Divestment Business may stipulate to support the PVB film capacity at Uentrop Facility, on terms to be negotiated between Kuraray and the purchaser with pricing on a cost-plus basis (such price to be determined by an independent expert whose appointment will be agreed with the Monitoring Trustee), for an initial period of three years renewable for up to two further one-year terms;

(e) At the purchaser's option, a transfer of all toll manufacturing and outsourcing agreements with third parties that support the Uentrop Facility;

(f) A long-term lease of the GLSV Business' R&D/technical service laboratory at the Mechelen Facility and the transfer of all machinery, plant and equipment specific to the laboratory;

(g) All other tangible and intangible assets used by the employees at the Mechelen Facility (including customer service group and supply chain team) that will be transferred to the Divestment Business;

(h) All employees at the Mechelen Facility that are necessary to ensure the continuation and development of the Divestment Business' operations;

(i) All other sales representatives and customer service representatives of the GLSV Business that are necessary to support the Divestment Business in the EMEA region;

(j) An assignment of the GLSV Business' contract with a third party that operates an interleaving facility and warehousing facility for the GLSV Business in Venlo (the Netherlands);

(k) The interleaving machinery, plant and equipment in Venlo that is owned by the GLSV Business and operated by a third party under contract (as described in point (j) above).

6. The legal and functional structure of the Divestment Business as operated to date is described in the Schedule. 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 intellectual property rights);

   (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. In addition, the Divestment Business includes the benefit, for a transitional period of up to one year after Closing and on terms and conditions equivalent to those at present afforded to the Divestment Business, of all current arrangements under which the GLSV Business or its Affiliated Undertakings supply products or services to the Divestment Business, as detailed in the Schedule, unless otherwise agreed with the Purchaser. Strict firewall procedures will be adopted so as to ensure that any competitively sensitive information related to, or arising from such supply arrangements (for example, product roadmaps) will not be shared with, or passed on to, anyone outside the business unit or division responsible for providing the products or services in question.

Section C. Related commitments

Preservation of viability, marketability and competitiveness

8. From the Primary Acquisition Effective Date until Closing, the Notifying Party 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 Kuraray 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 Kuraray's remaining business. Where, nevertheless, individual members of the Key Personnel exceptionally leave the Divestment Business, Kuraray shall provide a reasoned proposal to replace the person or persons concerned to the Commission and the Monitoring Trustee. Kuraray 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. The Notifying Party commits, from the Primary Acquisition 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 business(es) retained by Kuraray have no involvement in the Divestment Business; (ii) the Key Personnel and Personnel of the Divestment Business have no involvement in any business retained by Kuraray and do not report to any individual outside the Divestment Business.

10. Until Closing, Kuraray 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 Kuraray is retaining. As soon as possible after the adoption of the Decision and following consultation with the Monitoring Trustee, Kuraray shall nominate a Hold Separate Manager, who will be formally appointed by Kuraray on the Primary Acquisition Effective Date. 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 Kuraray. 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 Kuraray, require Kuraray to replace the Hold Separate Manager.

Ring-fencing

11. Kuraray shall implement, or procure to implement, all necessary measures to ensure that it does not, after the Primary Acquisition Effective Date, obtain any Confidential Information relating to the Divestment Business and that any such Confidential Information obtained by Kuraray before the Primary Acquisition Effective Date will be eliminated and not be used by Kuraray. This includes measures vis-à-vis Kuraray'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. Kuraray 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 Kuraray 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 two years after Closing.

Due diligence

13. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, Kuraray 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;

(b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

14. Kuraray 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 10 days after the end of every month following the Effective Date (or otherwise at the Commission's request). Kuraray 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 days of their receipt.

15. Kuraray 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 the Notifying Party 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;

    (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 Kuraray 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 week to the Commission and the Monitoring Trustee. Kuraray 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. <u>Appointment procedure</u>

18. No later than two weeks after the Effective Date, Kuraray shall appoint a Monitoring Trustee to carry out the functions specified in these Commitments for a Monitoring Trustee. The Notifying Party commits not to close the Concentration before the appointment of a Monitoring Trustee.

19. If Kuraray has not entered into a binding sale and purchase agreement regarding the Divestment Business one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by Kuraray at that time or thereafter, Kuraray 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 Notifying Party and its 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 the Notifying Party 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 Kuraray

22. No later than one week after the Effective Date, Kuraray shall submit the name or names of one or more natural or legal persons whom Kuraray proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one month before the end of the First Divestiture Period or on request by the Commission, Kuraray shall submit a list of one or more persons whom Kuraray 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;

    (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 name is approved, Kuraray 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 name is approved, Kuraray shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by the Kuraray

24. If all the proposed Trustees are rejected, Kuraray shall submit the names of at least two more natural or legal persons within one 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 Kuraray 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 Kuraray, 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 Kuraray 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 the Parties, 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 Kuraray does not after the Primary Acquisition 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 Kuraray before the Primary Acquisition Effective Date is eliminated and will not be used by Kuraray and

– decide whether such information may be disclosed to or kept by Kuraray as the disclosure is reasonably necessary to allow Kuraray 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 Kuraray or Affiliated Undertakings;

(iii) propose to Kuraray such measures as the Monitoring Trustee considers necessary to ensure Kuraray'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 Kuraray a non-confidential copy at the same time, a written report within 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 Kuraray a non-confidential copy at the same time, if it concludes on reasonable grounds that Kuraray is failing to comply with these Commitments;

(viii) within one week after receipt of the documented proposal referred to in paragraph 17 of these Commitments, submit to the Commission, sending Kuraray 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 17 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 Kuraray, subject to the Notifying Party'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 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to the Notifying Party.

III. Duties and obligations of the Parties

31. Kuraray shall provide and shall cause its advisors to provide the Trustee with all such co-operation, assistance and information as the Trustee may reasonably require to perform its tasks. The Trustee shall have full and complete access to any of Kuraray'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 Kuraray and the Divestment Business shall provide the Trustee upon request with copies of any document. Kuraray 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. Kuraray 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. Kuraray 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. Kuraray 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. Kuraray 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, Kuraray shall cause the documents required for effecting the sale and the Closing to be duly executed.

34. Kuraray 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 Kuraray 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 Kuraray, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to Kuraray'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 Kuraray refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard Kuraray. 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 Kuraray during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale.

36. Kuraray agrees that the Commission may share Confidential Information proprietary to Kuraray 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. The Notifying Party 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 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 Kuraray, require Kuraray to replace the Trustee; or

    (b) Kuraray 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 Kuraray or, in appropriate cases, on its own initiative. Where Kuraray requests an extension of a time period, it shall submit a reasoned request to the Commission no later than one 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 Kuraray 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 the Notifying Party 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 the Notifying Party. 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
Kuraray Co., Ltd.

SCHEDULE

1. The Divestment Business as operated to date has the following legal and functional structure:

The Divestment Business has operated to date as part of the GLSV Business, which in turn forms part of DuPont's Performance Materials business unit. An organisational chart illustrating the pre-divestiture legal and functional structure is provided below (the Divestment Business currently forms part of the GLSV Business indicated as "PVB" in the chart below): [DuPont internal organisation chart]

2. In accordance with paragraph [5] of these Commitments, the Divestment Business includes, but is not limited to:

(a) the following main tangible assets:

All tangible assets in relation to the GLSV Business' PVB film manufacturing plant in Uentrop, Germany (the Uentrop Facility), including but not limited to:

- Leased manufacturing facilities within a shared building (see map attached at <u>Confidential Exhibit 1</u> – area marked in red) including a jumbo PVB film extrusion line with current capacity of […] MT per annum and all associated machinery, plant and equipment;
- An open area adjacent to the manufacturing facilities, for handling and interim storage, including cooling and ventilation devices (see map attached at <u>Confidential Exhibit 1</u> – area marked in green);
- Four GLSV dedicated storage facilities plus adjacent ground (see map attached at <u>Confidential Exhibit 2</u> – area marked in blue); and
- All other machinery and equipment, devices, instruments and tools which form part of the Uentrop Facility and are necessary and contribute to their current operations, as listed in <u>Confidential Exhibit 3</u>;

At the GLSV Business' R&D/technical service laboratory and customer service/technical support facility in Mechelen, Belgium (the Mechelen Facility):

- A laboratory (to be provided under a long-term lease from DuPont) and the machinery and other equipment, devices, instruments and tools located therein, as listed in <u>Confidential Exhibit 4</u>; and
- All other tangible and intangible assets used by the employees at the Mechelen Facility (including customer service group and supply chain team) that will be transferred to the Divestment Business;

At Venlo (the Netherlands):

- Fixed interleaving machinery, plant and equipment that is operated by a third party under a contract the benefit of which will be transferred to the Divestment Business.

(b) the following main intangible assets:

- All know-how which currently resides at the Uentrop Facility;
- A three year royalty-free, irrevocable, exclusive license to use the "Butacite" trademark for the sale of all virgin (i.e., non-recycled) PVB film in the EMEA region;
- An unconditional royalty-free, irrevocable, exclusive license granted in perpetuity to use the following patents necessary for the production and sale of PVB film at the Uentrop Facility:

[…]

(c) the following main licences, permits and authorisations:

All licenses, permits and authorizations issued by any governmental organization solely for the benefit of the Divestment Business, including but not limited to the following in respect of the Uentrop Facility:

[…]

(d) the following main contracts, agreements, leases, commitments and understandings:

- Heritable Building Right Agreement (Uentrop)

  […]

- Right of Use Agreement (Uentrop)

  […]

- Site Services Agreement and SLAs (Uentrop)

  […]

- Laboratory Lease Agreement (Mechelen)

  […]

- Site Services Agreement and SLAs (Mechelen)

  […]

- Warehousing and Other Services Agreement (Venlo)

  […]

(e) the following customer, credit and other records:

All ongoing customer contracts for the sale of all products manufactured at the Uentrop Facility including all PVB film products (including but not limited to PVB film products for both architectural and automotive applications); and

All customer and credit records of the Divestment Business as held by the GLSV Business or DuPont including but not limited to:

- […]

(f) the following Personnel:

All personnel listed in Confidential Exhibit 5 including but not limited to the following:

- […]

(g) the following Key Personnel:

- Non-operational Key Personnel
  - (i) […]
  - (ii) […]
  - (iii) […]

- Operational Key Personnel
  - (i) […]
  - (ii) […]

(h) the arrangements for the supply with the following products or services by Kuraray or Affiliated Undertakings for a transitional period (as specified below) after Closing:

At the purchaser's option, a supply of PVB resin to the Divestment Business for an initial period of three years renewable for up to two further one-year terms, with pricing on a cost-plus basis (such price to be determined by an independent expert whose appointment will be agreed with the Monitoring Trustee); and

Transitional services, including accounting, IT, and HR support services as required by the Divestment Business, for a period of up to one year.

3. The Divestment Business shall not include:

(a) Retained personnel as identified in Confidential Exhibit 6;

(b) The GLSV Business' PVB film facility in Holesov, Czech Republic and all personnel, intellectual property, customer contracts or goodwill specific to the manufacture and sale of recycled PVB film from such facility;

(c) The GLSV Business' PVB resin and PVB film facility in Fayetteville, US and all personnel, intellectual property, customer contracts or goodwill specific to the manufacture and sale of products from such facility;

(d) The GLSV Business' PVB resin facility in Parkersburg (Washington Works), US and all personnel, intellectual property, customer contracts or goodwill specific to the manufacture and sale of products from such facility;

(e) The GLSV Business' PVB film facility in Ulsan, South Korea and all personnel, intellectual property, customer contracts or goodwill specific to the manufacture and sale of products from such facility;

(f) The GLSV Business' VAM and PVA facility in LaPorte, US and all personnel, intellectual property, customer contracts or goodwill specific to the manufacture and sale of products from such facility;

(g) Any other assets or personnel of the GLSV Business outside of the EMEA region;

(h) Any personnel, intellectual property, customer contracts or goodwill in relation to the "SentryGlas" product;

(i) Any personnel, intellectual property, customer contracts and goodwill in relation to PVA or VAM products as manufactured and sold by the GLSV Business; and

(j) The "DuPont" name or any rights thereto.

4. If there is any asset or personnel which is not be covered by paragraph 2 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.