EN

Case No COMP/M.5992 - SUD-CHEMIE / ASHLAND / ASK JV

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REGULATION (EC) No 139/2004
MERGER PROCEDURE

Article 6(1)(b) NON-OPPOSITION
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PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying parties

Dear Sir/Madam,

Subject: Case No COMP/M.5992 – SUD-CHEMIE / ASHLAND / ASK JV
Notification of 22/10/2010 pursuant to Article 4 of Council Regulation No 139/2004[1]

1. On 22/10/2010, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 by which the undertakings Süd-Chemie AG ("Süd-Chemie", Germany), controlled by J.P. Morgan Chase & Co., and Ashland Inc. ("Ashland", USA; Süd-Chemie and Ashland are hereinafter together referred to as "the Notifying Parties"), transfer assets to an existing full-function joint venture, Ashland-Südchemie Kernfest GmbH ("ASK", Germany), thereby extending the scope of its activities.

2. After examination of the notification, the Commission has concluded that the notified operation falls within the scope of the Merger Regulation and does not raise serious doubts as to its compatibility with the internal market and the EEA Agreement.

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

I. THE PARTIES

3. Süd-Chemie is a German company active in the development, manufacturing and supply of speciality chemical products for different sectors (energy and environment, adsorbents and additives, catalytic technologies, water treatment, performance packaging and foundry products and speciality resins). J.P. Morgan, which controls Süd-Chemie, is not active in foundry products nor does it control any other companies active in this field.

4. Ashland is a US corporation manufacturing and supplying composite polymers, adhesives, metal casting consumables, process and utility water treatments, cellulose ethers, lubricants, automotive chemicals and distribution of chemicals and plastics and composite materials.

5. ASK, headquartered in Germany, is an existing joint venture controlled by Süd-Chemie and Ashland and will serve as the holding company for all the businesses to be further transferred by its parent companies. ASK is currently active in the manufacturing and supply of chemical products for the foundry industry and specialty resins, particularly for the paint and coatings industry.

6. Post-merger, the enlarged joint-venture (hereinafter "New ASK") will further extend its activities in the development, production and sale of foundry consumables.

II. THE OPERATION AND THE CONCENTRATION

7. The Notifying Parties entered into a Master Formation Agreement and a Master Contribution and Sale Agreement on 15 July 2010 providing for the transfer of all shares of companies/affiliates and assets to be contributed to New ASK. The Notifying Parties also agreed upon a Shareholder's Agreement on 14 July 2010, to be entered into at closing.

8. Through the operation, Süd-Chemie and Ashland will transfer to New ASK all activities related to their foundry consumables (except Süd-Chemie's foundry bentonite, which will be retained by Süd-Chemie), including the necessary intellectual property rights and know-how. This transfer of assets and activities will bring about an extension of the activities of ASK into other product and geographic markets[2]. The transaction is therefore a concentration within the meaning of Article 3 of the Merger Regulation.

III. EU DIMENSION

9. The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 000 million[3] (Süd-Chemie EUR […] million, Ashland […] million, ASK […] million). Two of them have an EU-wide turnover in excess of EUR 250 million (Süd-Chemie EUR […] million, Ashland EUR […] million), but they do not achieve more than two-thirds of their aggregate EU-wide turnover within one and the same Member State. The notified operation therefore has an EU dimension.

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[2] See paragraphs 106 and 107 of the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) Nº 139/2004 on the control of concentrations between undertakings (Commission Consolidated Jurisdictional Notice, OJ C95, 16.04.2008, p1).

[3] Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Consolidated Jurisdictional Notice.

IV. OVERVIEW OF THE INDUSTRY

1. The proposed transaction concerns foundry consumables which notably include foundry binders, foundry filters, non-filter feeding aids, refractory coatings, metallurgical additives and auxiliary material.

2. Castings, the products of the metal founding industry, are manufactured in a single step from liquid metal. In the casting process, a solid metal is melted, heated to a certain temperature and sometimes treated to modify its chemical composition, and is then poured into a cavity or mould, which contains it in the desired shape during solidification. The casting of hollow shapes can be achieved by placing a 'core' inside the mould.

3. Different metals have different melting temperatures. There are also various casting processes that differ primarily in the mould material, i.e. sand, metal, or other material, and the pouring method, e.g. gravity, vacuum, low pressure, or high pressure. More than 90% of metal cast in the EEA is cast by traditional (or sand) casting, where molten metal is introduced into a sand mould and allowed to solidify within the mould. The Parties' products are used primarily for sand casting.

V. COMPETITIVE ASSESSMENT

1. Product market definition

1.1. Foundry binders

4. Foundry binders (bentonite and different types of synthetic resins) are used to bind, form and compress sand to form moulds and cores used to cast metal parts.

1.1.1. Foundry bentonite and foundry resins

5. Two basic forms of sand-based mould-making can be distinguished. Whereas the *"green sand" process* uses a mixture of bentonite, watered silica sand, lustrous carbon generators and other additives to create the mould, *resin-based techniques* add synthetic resins to the sand, that lead to the solidification of the sand by means of chemical reactions.

6. The Parties submit that foundry bentonite and foundry resins constitute separate product markets. They argue that technical specifications for green sand casting and resin-based sand casting differ so fundamentally that a foundry has to be designed and built specifically for one or the other process. The Parties also emphasize that it is not possible to use bentonite as a binder to produce cores.

7. In S&B/Halliburton/CEBO[4], the Commission left the exact market definition open. The market investigation in the present case confirmed the view of the Notifying Parties that foundry bentonite and foundry resin binders form separate product markets. First, most respondents to the market investigation consider that bentonite and resin binders are not

[4] See COMP/M.4562 - *S&B/Halliburton/CEBO JV*, Commission's decision of 18 April 2007 (recital 23).

substitutable from a technical point of view as their technical properties, application, efficiency and suitability for specific production processes prevent them from being practical alternatives. In particular, bentonite is used for green sand moulding while resin binders are used for chemical sand moulding. Second, all respondents to the market investigation indicated that the cost of foundry bentonite was significantly lower than the cost of resin binders. Finally, the market investigation also emphasized that switching costs between foundry bentonite and resin binders are very significant for foundries and that this process would also take significant time.

1.1.2. Hand moulding resin binders and serial-moulding resin binders

8. Two basic types of sand-casting processes can be distinguished, each of which uses different combinations of binders: large-scale casting and serial casting. For the casting of very large parts or parts produced in small numbers, foundries typically apply the *hand-moulding process*. This is a technique where the material that forms the mould or the core is formed into shape manually or with the aid of tools. In this process, mainly self-hardening binders, which have a longer reaction time, are used. For machine-based production of moulds (serial casting), the *serial-moulding process* is used. In this process, the patterns for moulds and cores are pressed into the sand with special automated stamps, which allows for the rapid creation of a large number of identical cores and moulds. Foundries engaged in serial-moulding apply heat-cured or gas-cured binding systems with very short reaction times.

9. The Parties submit that there are different product markets for (1) self-hardening binders for the hand moulding process and (2) heat or gas triggered binders for the serial moulding process on the other hand. They argue that most resins are tailor made for one of these processes and cannot be substituted by other resins. In addition, there are significant price differences between resins for different applications.

10. In Apollo/Bakelite[5], the Commission left the exact definition of the product market open. However, its market investigation revealed that resins for different foundry processes are only substitutable to a limited extent. The market investigation in the present case confirmed the view of the Parties that hand moulding resin binders and serial moulding resin binders form separate product markets as most respondents consider that they are not substitutable from a technical point of view.

1.1.3. Heat cured serial-moulding binders and gas-cured serial moulding binders

11. The Parties contest a segmentation into heat-cured and gas-cured binders for serial moulding resin binders. Although there may be differences in price and performance between these products, they argue that, from a technical and economic point of view, a foundry using heat-cured binders could easily switch to gas-cured binders and that, in some countries, most foundries have switched from heat-cured to gas-cured products. They further argue that supply-side substitutability is high (the chemical composition and the manufacturing process are similar) and that all major suppliers produce and sell both types of resins.

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5 See COMP/M.3593 – Apollo/Bakelite, Commission's decision of 11 April 2005 (recital 82).

12. The market investigation was not conclusive on the question of whether heat cured serial-moulding binders and gas-cured serial moulding binders form separate product markets. Most suppliers of foundry consumable products manufacture indeed both types of serial-moulding binders. There are also indications of supply-side substitutability as a majority of them consider that the manufacturing process is similar for both gas-cured and heat-cured resin binders. However, while most competitors consider that they are substitutable from a technical point of view, a majority of customers indicate that they are not, as gas-cured serial moulding binders are a more expensive product, not environmental friendly, generally used in complicated processes and more oriented to the core making process. Finally a majority of respondent to the market investigation indicate that switching costs between these different types of serial-moulding resin binders are significant, as it is the time required for such a switch.

13. In any event, for the purpose of this Decision whether heat cured serial-moulding binders and gas-cured serial moulding binders form separate product markets can be left open, as the transaction would not raise competitive concerns under any alternative.

1.1.4. Phenol-formaldehyde resins and urea formaldehyde resins

14. Water soluble urea-formaldehyde ("UF") resins and phenol-formaldehyde ("PF") resins may be used to make foundry shapes based on processes that utilize catalysts or heat to cause the sand-binder mixture to harden. In Industri Kapital/Perstorp II[6], the Commission concluded that UF resins and PF resins constitute separate product markets both from the supply and demand side.

15. According to the Parties, a further segmentation of foundry resin binder into the UF and PF categories is however not relevant. UF resins are not used as stand-alone products in the foundry industry because of their nitrogen content, which when dissolved result in unacceptable porosity in iron castings. UF resins are nevertheless sometimes added to PF binder resin mixtures in order to avoid certain product deficiencies, for example in some heat-curing mixtures.

16. The market investigation confirmed the view of the Parties that a further segmentation of foundry resin binders into the UF and PF categories is not relevant. First, although UF resins may be used in hot-box applications[7], they are not typically used as a stand-alone product in the foundry industry. Second, most respondents to the market investigation consider that mixtures of UF and PF resins are substitutable with "pure" PF resins.

1.1.5. Conclusion

17. For the purpose of this decision, it is considered that foundry bentonite, hand moulding resin binders and serial moulding resin binders constitute separate product markets. Whether the market for serial moudling resin binders may be subsegmented into heat

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6 See IV/M.2396 – Industri Kapital/Perstorp (II), Commission's decision of 11 April 2001 (recital 10).

7 After the mould or the core is built, the mixture has to harden through a chemical reaction. In the case of serial moulding, the hardening can be triggered by heat, a process called hot-box or warm-box depending on the temperature applied. Hot-Box and warm-box binders are therefore two types of heat cured binders.

cured serial-moulding binders and gas-cured serial moulding binders can be left open since it does not affect the competitive assessment in this case.

1.2. Foundry filters

18. Foundry filters are a type of technical ceramic which is placed in the gating system leading to the mould, and either remove non-metallic impurities from the molten metal, or control the flow or melt current of the metal as it fills the mould. Filters generally come in two forms: a porous foam-like structure with interconnected pores that vary in direction or cross section ("foam filters"), or an extruded porous cellular or honeycomb structure with cells of various shapes and constant cross section ("strainers"). Foam filters can also be differentiated according to their chemical composition. Ceramic casting filters can particularly be produced from high purity aluminium oxides ("alumina"), silicon carbide ("SiC") and zirconium dioxide ("zirconia").

19. The Parties submit that strainers, alumina foam filters, SiC foam filters and zirconia foam filters form separate product markets. They argue that there is limited demand side substitutability between the different types of filters since filters are tailored to the metals and casting operations they are used in. Supply side substitutability would be limited as well.

20. In Cookson/Foseco[8], the Commission left the exact product market definition open but found indications that product markets for filters should be distinguished according to their different applications and therefore that strainers, alumina foam filters, zirconia foam filters and SiC foam filters form separate product markets.

21. The results of the market investigation in this case indicate that each foundry filter (namely SiC, zirconia, alumina foam and strainers) constitute a separate product market. From a demand side point of view, foam filters and strainers are not interchangeable for different applications. Prices of filters differ significantly, which also limits switching between them. Foundry filters are, in particular, customised to the metals and casting operations they are used in. Thus, in steel casting, only zirconia foam filters can be used due to the high temperature of the molten metal. Due to their chemical composition, in effect, SiC and alumina foam filters are not a realistic alternative in steel casting. Nor are strainers, which have a significantly lower temperature resistance. In iron casting, only strainers and SiC foam filters are used. Technically it would be possible to use zirconia foam filters for iron casting. However, foundries do not switch to zirconia foam filters, notably because they are 5 to 10 times more expensive than SiC foam filters. Finally, for alloy casting, alumina foam filters are used. Alumina foam filters are however not used for iron or steel casting.

22. From a supply side point of view, substitutability is also limited since the properties shared by the filters involve different manufacturing processes, expertise and know how. In particular alumina, zirconia and SiC foam filters are generally manufactured in different production facilities. Few filter manufacturers produce all types of foam filters: most specialise in a single type. Manufacturers with a focus on one type of filter generally consider it difficult to switch production to other foam filters.

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8 See COMP/M.4961 – Cookson/Foseco, Commission's decision of 4 March 2008 (recitals 24-26).

23. In view of the above, it is considered that zirconia foam filters constitute a distinct product market. However, for the purpose of this decision, the precise product market definition for other foundry filters may ultimately be left open as under any alternative product market definition the transaction does not raise serious doubts as to its compatibility with the internal market

1.3. Refractory coatings

24. Refractory coatings, also called as core washes, are used on cores and moulds to enhance the surface finish of the casting and reduce defects which occur at the sand-metal interface. The refractory materials used are mainly aluminosilicates, carbonaceous dressings and zirconium silicates. Refractory coatings may be applied either as a wash (the liquid medium being either water or alcohol) or as a dry solid.

25. The Notifying Parties propose to define one single product market for all refractory coatings. They argue that most refractory coatings are used interchangeably, they do not differ greatly in terms of performance and thus coatings are widely substitutable from a demand side perspective. In particular, they submit that it is not appropriate to differentiate between water-based and alcohol-based coatings, as the two product groups are used interchangeably and have the same properties. Additionally, unlike binders, the coatings for hand-moulding and serial-casting are basically identical and only differ in terms of viscosity. They further argue that it is not possible to distinguish coatings according to the coating material (aluminosilicates, carbonaceous dressings and zirconium silicates), since the diverse materials are widely substitutable and often used in a variety of combinations. Moreover, the Notifying Parties consider that separating coatings for steel castings, which have to withstand higher temperatures, and coatings for non-steel (iron or aluminium) casting, is artificial since many coatings can be used for the casting of different types of metals. Finally, in their view, from a supply side perspective there is wide substitutability as the production process and the technical equipment for the production do not differ much between different types of coatings.

26. The market investigation is not conclusive with respect to the product market definition. However, contrary to the submission of the Notifying Parties, respondents tend to suggest that the market should be sub-segmented into refractory coatings for steel and non-steel castings. Most respondents do not see appropriate, however, to distinguish between coatings for hand-moulding and serial-casting.

27. In any event, for the purpose of this Decision the relevant product market can be left open, as under no product market definition would the transaction raise competitive concerns.

1.4. Non-filter feeding aids

28. Non-filter feeding aids are products that assist in the flow of top-up molten metal into the casting mould. They are available in a variety of different formats and technologies. As a result, a distinction may be made between fibre sleeves (also called "risers"), fibre insertables, non fibre insertables and mini-risers.

29. The Notifying Parties submit that there may be one single relevant product market for all non-filter feeding aids. However, they recognize that it may also be appropriate to consider that there are separate submarkets for sleeves and mini-risers and that sleeves

may additionally be separated into traditional fibre sleeves and insertables. They consider that there is only a difference in the manufacturing method between them that gives some technical advantages for the user of non-fibre insertables (but at higher cost). They argue that a fibre product can always be used in place of a non-fibre product.

30. The market investigation casted some doubts with respect to the market definition proposed by the Notifying Parties, but was not conclusive. In any event, for the purpose of this Decision the relevant product market can be left open, as under no product market definition would the transaction raise competitive concerns.

1.5. Metallurgical additives

31. Metallurgical additives are substances added to the molten iron during the casting process in order to positively influence the chemical composition and mechanical properties of the cast iron. These additives include master alloys, cored wires and different types of inoculants.

32. The Notifying Parties propose to define one single product market for metallurgical consumable additives. Whether a further segmentation into submarkets for master alloys, cored wires and the different type of inoculants is appropriate can be left open, as no overlaps arise under any possible market definition.

1.6. Auxiliary material

33. Auxiliary material collectively refers to chemical agents and components which are usually used and supplied in conjunction with binders. It comprises release agents used to facilitate smooth separation of the casting mould or core from the cast product, core adhesives for the assembly of compound shapes, and metal cleaners for the cleaning of cast parts and working equipment.

34. Due to their inferior costs and the fact that they are almost always purchased and supplied together with binders, the Notifying Parties submit that such products are part of a single product group, referred to as "binder resin systems". The Notifying Parties estimate that approximately 80% of the foundry customers purchase auxiliary agents together with binders.

35. The market investigation was not conclusive on the question whether auxiliary material forms a separate product market from binders and whether it should be further segmented into release agents, core adhesives and other auxiliary material (additives, metal cleaners, lubricants, etc.) and casted some doubts on the product market definition suggested by the Notifying Parties, indicating that suppliers do not always provide the whole product range and customers not necessarily purchase these products together. In any event, for the purpose of this Decision the relevant product market can be left open, as under no product market definition the transaction raises competitive concerns.

2. Geographic Market Definition

2.1. Foundry binders

36. The Parties submit that the relevant geographic markets for resin binders are national in scope. They argue that transportation costs, import tariffs and technical properties of binders make intercontinental trade prohibitive. They further point to the need for extensive customer support and strong geographic differentiation. In addition, they argue that price levels and demand structure differ throughout the EEA. The Parties further emphasize variations in demand structure according to end use production, metal types, local habits and levels of manufacturing sophistication.

37. In past cases[9], the Commission left the scope of the relevant geographic market open. However, in Industri Kapital/Perstorp (II), the Commission considered the markets as wider than national. In Apollo/Bakelite[10], a more recent decision, the market investigation pointed to national or regional markets as most customers in the foundry industry require responsive technical support and source their resins from suppliers with manufacturing facilities in their country.

38. The market investigation in the present case has confirmed the view of the Notifying Parties that the markets for foundry binders are national. In particular, although customers sometimes source binders from other countries that the ones where their foundries are located, most respondents consider that local customer support is very important for both resin binders and foundry bentonite. Most customers indicate that they negotiate prices at national level for resin binders and foundry bentonite and most competitors indicate that price levels vary within the EEA from country to country, notably due to logistic costs. Finally, with regard to resin binders, a majority of competitors indicate that EEA countries vary significantly in terms of technical requirements, as a result of national regulations and historical preferences.

39. In view of the above, it is considered for the purpose of this decision that the markets for foundry binders are national in scope.

2.2. Foundry filters

40. The Parties submit that filters markets are either EEA-wide or worldwide in scope. In Cookson/Foseco[11], the Commission ultimately left the scope of the geographic market for foundry filters open. The Commission however found that the relevant geographic market could be smaller than worldwide, i.e. EEA-wide, but found no indications that the market could be smaller than EEA-wide.

41. The market investigation has largely confirmed the view of the Notifying Parties that the geographic market for filters is at least EEA-wide, given that transportation costs represent a small percentage in total production costs and that the sourcing and the

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9 See COMP/M.3593 – Apollo/Bakelite, Commission's decision of 11 April 2005 (recital 83) and IV/M.2396 – Industri Kapital/Perstorp (II), Commission's decision of 11 April 2001 (recital 43).

10 See COMP/M.3593 – Apollo/Bakelite, Commission's decision of 11 April 2005 (recital 83).

11 See COMP/M.4961 – Cookson/Foseco, Commission's decision of 4 March 2008 (recitals 33-34).

distribution of filters is performed either at EEA-wide or at a worldwide level. However the provision of local customer support is still a relevant factor.

42. The exact geographic market definition can however be left open, as the transaction does not raise serious doubts as to its compatibility with the internal market under both the assumption of an EEA-wide market or a worldwide market.

2.3. Refractory coatings

43. The Notifying Parties submit that the geographic scope of the market for refractory coatings is national in scope. They argue that transportation costs play a significant role for coatings, which are relatively cheap, and that most customers rely heavily on local technical product support. According to the Notifying Parties, foundry customers purchase and source refractory coatings locally in the country where their foundry is situated.

44. The market investigation confirms the view of the Notifying Parties. Respondents in general do not consider that there would be any competitive pressure on suppliers from outside the EEA, they indicate that prices are different within the EEA and explain that local customer support indeed play a crucial role. Whereas these elements tend to suggest that markets are smaller than EEA, the exact geographic market can be left open for the purpose of this Decision as the transaction does not raise any competition concern under any alternative market delineation.

2.4. Non-filter feeding aids

45. The Notifying Parties submit that the markets for the various types of non-filter feeding aids are EEA-wide. They indicate that most players selling sleeves and mini-risers operate at a European level making these products in one European location and shipping them throughout the EEA, although they have to provide sales team support in the local language. There are only a few national suppliers. Moreover, the Notifying Parties argue that prices are generally fairly uniform across the EEA, although they recognize that it is difficult to compare national price levels due to differences in product and demand structure.

46. The Notifying Parties also argue that the market is not wider than EEA-wide as customers do not generally source non-filter feeding aids from other continents because transport costs make it uneconomical, although for mini-risers, a somewhat higher value product, shipping costs are slightly less important. The Parties further point to the fact that, according to their estimates, more than 95% of the demand for non-filter feeding aids is met by manufacturers based in the EEA.

47. The market investigation pointed to some elements in favour of potential national markets, such as importance of local customer-assistance and price differences between Member States, but cannot be regarded as conclusive. In any event, for the purpose of this Decision the relevant geographic market can be left open, as under no geographic market definition the transaction raises competitive concerns.

2.5. Metallurgical additives

48. The Notifying Parties take the view that the market for metallurgical additives is EEA-wide in scope. They argue that most European foundries are supplied by producers with production facilities in the EEA. Furthermore, they submit that transportation costs for these relatively cheap products significantly impede transport over long distances. On the other hand, the Notifying Parties also point to the fact foundries using these products need responsive local technical support.

49. The exact geographic market definition of the markets for metallurgical additives can be left open as no overlaps arise between the Parties under any possible geographic market definition.

2.6. Auxiliary material

50. The Notifying Parties submit that auxiliary materials are typically purchased and supplied together with binders and coatings and that for the same reason as for these products the geographic scope of a potential market for auxiliary material is national. In particular, the Notifying Parties emphasize that these products are customized to specific foundry processes and require a responsive technical support.

51. The market investigation was not conclusive on the question. In any event, for the purpose of this Decision the relevant geographic market can be left open, as under no product market definition the transaction raises competitive concerns.

3. Competitive Assessment

3.1. Horizontal effects

52. Ashland and Süd-Chemie's business activities are for a large part complementary. The only product areas in which their activities overlap are foundry filters and non-filter feeding aids. Additionally, Ashland's and ASK's activities overlap in a number of products, i.e. binders, coatings, filters and non-filter feeding aids.

53. The Parties submit that because ASK is already controlled by the notifying Parties, overlaps relevant to a competition assessment cannot arise between ASK and Süd-Chemie, or ASK and Ashland, respectively. They consider that the only overlaps which could potentially give rise to competition concerns would be those between the activities to be contributed to New ASK by the notifying Parties.

54. For the different markets involved, the market investigation sought to clarify, when relevant for the assessment, whether ASK and its parent companies were considered as part of the same economic entity, pursuing a common commercial policy, or as competing companies (either actual or potential), offering distinct products and services to customers.

3.1.1. Foundry binders

55. The foundry bentonite business is not part of the transaction, since it is retained by Süd-Chemie and thus not contributed to New ASK. Moreover, there are no overlaps between the Parties in this market. In addition, no affected markets arise at the national level in the market for hand moulding resin binders. The competitive assessment therefore

concentrates on the market for serial-moulding resin binders and its possible sub-segmentations.

56. While Ashland and ASK sell serial-moulding resin binders, Süd-Chemie supplies none. On the market for serial moulding-binders (Table 1) and its potential subsegment for gas-cured serial moulding binders (Table 2), ASK's and Ashland' combined market shares exceed 15% in Germany, Czech Republic and Hungary. No affected markets arise on a potential subsegment for heat-cured serial moulding binders.

Table 1: Market for serial moulding resin binders, 2009

	Czech Republic	**Germany**	**Hungary**
Süd-Chemie	0%	0%	0%
Ashland	[0-5]%	[0-5]%	[20-30]%
Ask	[30-40]%	[30-40]%	[60-70]%
New Ask	[30-40]%	[30-40]%	[80-90]%
Huettenes-Albertus	[30-40]%	[50-60]%	[5-10]%
Foseco	[5-10]%	[5-10]%	[0-5]%
Furtenbach	[5-10]%	[0-5]%	[0-5]%
Hexion	[5-10]%	[0-5]%	[0-5]%
Others	[10-20]%	[0-5]%	[0-5]%

Table 2: Market for gas-cured serial moulding resin binders, 2009

	Czech Republic	**Germany**	**Hungary**
Süd-Chemie	0%	0%	0%
Ashland	[0-5]%	[0-5]%	[30-40]%
Ask	[30-40]%	[40-50]%	[60-70]%
New Ask	[30-40]%	[40-50]%	[90-100]%
Huettenes-Albertus	[30-40]%	[40-50]%	[0-5]%
Foseco	[5-10]%	[0-5]%	[0-5]%
Furtenbach	[5-10]%	[0-5]%	[0-5]%
Cavenaghi	[0-5]%	[0-5]%	[0-5]%
Others	[20-30]%	[0-3]%	[0-5]%

57. In the Czech Republic and Germany, the overlaps between the Parties are minimal (less than 1%), therefore the competitive situation is not changed significantly by the transaction: Ashland had no sales presence and only generated minor sales to one customer in each country. Accordingly, most German customers of resin binders contacted in the course of the market investigation indicated that they did not consider Ashland and ASK as competing entities prior to the merger. Moreover, the Parties will continue to face strong competition from Hüttenes-Albertus in Germany. In the Czech Republic, ASK will also continue to face a number of significant competitors, including Hüttenes-Albertus, Foseco and Furtenbach.

58. In Hungary, the parties have high market shares and significant overlaps both regarding serial moulding resin binders (Table 1) and gas-cured serial moulding resin binders (Table 2). Hungary is a small market for these products (1.4% of the EEA market for serial moulding binders) and ASK's strong position comes from supplying mainly 2 large foundries from ASK's German production facility in Wülfrath. Ashland, in turn, supplies only one large foundry, from its Italian subsidiary. The rest of the market is composed of smaller foundries which are served by the Parties' competitors, notably Hüttenes-Albertus and Furtenbach.

59. Although Ashland and ASK combined market share in Hungary is very high, the specific circumstances of the case lead to the conclusion that the transaction does not raise competition concerns in this market. First, the market investigation showed that ASK was not actively competing with its parent company pre-merger. Most Hungarian

customers, indeed, did not consider ASK and Ashland as independent alternative sources of supply prior to the transaction. Second, the combined market shares are achieved with only three large customers, also active in other countries and belonging to international groups. The loss of only one of these clients would drastically change the market structure in Hungary. Third, Hungarian customers confirmed that there are credible alternative sources of supply from production facilities outside Hungary, notably in Austria and Germany, where large players such as Hüttenes-Albertus, Foseco and Furtenbach have strong market positions. In fact, ASK and Ashland supply as well the Hungarian market from facilities situated in other countries, since no resins are produced in Hungary. The market investigation revealed as well that the three large Hungarian customers have switched in the past between different suppliers. Contracts in Hungary usually last for one year only and contract volumes can be adjusted during the lifetime of the contract. Therefore, a customer is not bound to a supplier for a long period of time. Fourth, although one customer of the parties in Hungary expressed some concerns regarding the effects of the concentration, it considered, in fact, that Ashland and ASK constitute one and the same entity already before the merger. The other Hungarian customers, in turn, did not raise concerns.

60. Based the results of the market investigation, it is therefore concluded that the transaction does not raise serious doubts as to its compatibility with the internal market with regard to foundry binders.

3.1.2. Foundry filters

61. The notified transaction only leads to a horizontally affected market in zirconia foam filters. Table 3 below shows the Parties' and their main suppliers' market shares on zirconia foam filters.

62. Only Süd-Chemie is active in the production and supply of foundry foam filters, through its US-based subsidiary Hi-Tech Ceramics. Hi-Tech has been distributing its filters in the EEA since 2009 primarily through ASK. It also supplies zirconia foam filters to foundry customers in Belgium, France and Italy through an independent sales agent, […] Outside the EEA, Süd-Chemie distributes the filters itself. Ashland has only a minimal presence in the market for foundry filters and does not produce any filters of its own, but purchases filters from third party suppliers and sells them to its foundry customers. In fact, Ashland mainly distributes Süd-Chemie's filters in the UK. Similarly, ASK has no filter production of its own and its activities in zirconia foam filters result wholly from the distribution of Hi-Tech filters in the EEA.

Table 3: Market for zirconia foam filters, 2009

	EEA	World
Süd-Chemie (Hi-Tech)	[0-5]%	[30-40]%
Ashland	[0-5]%	[0-5]%
Ask	[30-40]%	[10-20]%
New ASK	**[40-50]%**	**[40-50]%**
Foseco	[40-50]%	[30-40]%
Drache	[0-5]%	[0-5]%
Selee	[5-10]%	[10-20]%
Lanik	[0-5]%	[0-5]%
Others	[0-5]%	[5-10]%

Source: Parties' best estimates

63. In the EEA, after the transaction New ASK would have a [40-50]% market share (ASK [30-40]%/ Süd-Chemie [0-5]% / Ashland [0-5]%). In a worldwide market, New ASK would have a [40-50]% market share (ASK [10-20]%/ Süd-Chemie [30-40]% / Ashland [0-5]%). It seems, however, that in the market for zirconia foam filters the Parties were not to be considered, prior to the merger, as independent sources of supply. In effect, as indicated, only Süd-Chemie manufactures zirconia foam filters. ASK's activities are limited to the distribution of the filters of Süd-Chemie, one of its parent companies. Ashland activities in these market, in turn, are de minimis and consist mainly also in the distribution of Süd-Chemie's filters. The merger, thus, does not seem to significantly change the structure of the market.

64. In the EEA, the market leader in the supply of zirconia foam filters is Foseco with a slightly higher market share than the merged entity. Moreover, the market investigation has confirmed the relevance of other competitors such as Selee, Drache, Vesuvius and Lanik. Furthermore, the investigation highlighted the lack of significant barriers to entry in zirconia foam filters and that market entry is expected from Chinese suppliers.[12] Worldwide, the Parties face significant competition as well from the above-mentioned producers. Chinese and other Asian competitors are generally very price aggressive and are quickly catching up in terms of product quality.

65. The almost unanimous reply from customers to the market investigation signals that the transaction will not have any impact in relation to foundry filters. In particular, all but one of the customers indicated that the transaction does not give rise to any anti-competitive effects in the market for zirconia foam filters. Similarly, almost all of the

[12] The Parties estimate that the total cost for gathering the necessary know-how, set-ting up production facilities, establishing distribution systems, promotion, advertising etc. would amount to less than EUR 5 million to achieve a 5% market share. Entry could occur within 6-12 months.

replies from competitors to the market investigation also indicate that the transaction does not raise concerns in zirconia foam filters.

66. Based on the prevailing market structure and the results of the market investigation, it is concluded that the transaction does not raise serious doubts as to its compatibility with the internal market with regard to zirconia foam filters or, more generally, in any potential market for foundry filters.

3.1.3. Refractory coatings

67. While ASK and Ashland produce and supply refractory coatings in the EEA, Süd-Chemie is not active in this market. Depending on the geographic market definition retained and based on the information submitted by the Notifying Parties, the transaction leads to affected markets at the EEA-level or in Spain.

Table 4: Affected markets for all refractory coatings, 2009

	Spain	**EEA**
Süd-Chemie	0%	0%
Ashland	[30-40]%	[0-5]%
Ask	[0-5]%	[20-30]%
New Ask	[30-40]%	[30-40]%
Hüttenes-Albertus	[10-20]%	[30-40]%
Foseco	[50-60]%	[20-30]%
Furtenbach	[0-5]%	[0-5]%
Others	[0-5]%	[10-20]%

68. As Table 4 shows, New Ask (with an addition of [0-5]% market share) will have a comparable market position to the other main suppliers in the EEA, namely Hüttenes-Albertus ([30-40]%) and Foseco ([20-30]%). Should the markets be defined as national, the only Member State where the transaction will result in an affected market would be Spain, where the transaction would bring about a less than [0-5]% market share increase, given the very limited activities of ASK in this Member State.

69. Should the markets of coatings for steel and non-steel castings differ the situation would be similar. The two affected markets would be the market for refractory coatings for

steel castings in the EEA, where the combined market share of the Parties would be [20-30]% (Ashland [5-10]%, ASK [10-20]%) with large competitors such as Foseco ([20-30]%), Hüttenes-Albertus ([20-30]%) and Furtenbach ([0-5]%), and the market for refractory coatings for non-steel castings in the EEA where the transaction would lead to a [30-40]% combined share (Ashland [0-5]%, ASK [20-30]%), the main competitors being Foseco ([20-30]%) and Hüttenes-Albertus ([30-40]%). Finally, should the markets be national, the only affected market would be the Spanish market for refractory coatings for non-steel castings, where Ashland has [30-40]% and ASK a less than [0-5]% market share.

70. In the course of the market investigation, customers did not raise concerns, while competitors had a more divided view. Market data suggest that the transaction will not lead to substantial lessening of effective competition under any potential market definition. First, should the market be defined as national, the only overlap occurs in Spain, where ASK has a minor market presence, thus the transaction will not lead to substantial change in this market. Second, under any potential market definition New Ask will face competition by other strong players. Thus, the transaction is unlikely to raise competition concerns on the market(s) for refractory coating.

3.1.4. Non-filter feeding aids

71. Regarding non-filter feeding aids, the only affected markets are in Italy, namely the potential market encompassing all non-filter feeding aids as well as the potential market for mini-risers. In both situations, the combined market shares of ASK and Ashland would be modest whereas Süd-Chemie is not active in the market. As Table 5 shows, significant competitors exist, such as Foseco (which holds half of the market), Hütennes-Albertus and GTP Schaeffer.

Table 5: Markets for non-filter feeding aids and for mini-risers, 2009

	All non-filter feeding aids - Italy	**Mini-risers - Italy**
Süd-Chemie	0%	0%
Ashland	[5-10]%	[5-10]%
Ask	[10-20]%	[10-20]%
New Ask	[10-20]%	[20-30]%
Foseco	[50-60]%	[50-60]%
GTP Schaefer	[5-10]%	[10-20]%
Hüttenes-Albertus	[5-10]%	[10-20]%
Others	[10-20]%	[10-20]%

72. As the market share data show, New ASK will face a number of considerable competitors post-merger. Also, the market investigation did not identify any concern in the Italian market for non-filter feeding aids and on the Italian market for mini-risers. Therefore, the transaction is unlikely to raise competition concerns on these markets.

3.1.5. Metallurgical additives

73. No overlaps arise in the markets for metallurgical products. Only Süd-Chemie is active in this product field. However, neither Ashland nor ASK are currently selling these products.

3.1.6. Auxiliary material

74. Regarding auxiliary material, the transaction leads to affected markets at the EEA-level for a potential market encompassing all auxiliary material as well as for a potential market for auxiliary materials other than parting agents and core adhesives.

Table 6: The market(s) for auxiliary material, 2009

Markets for all auxiliary material	EEA	Markets for auxiliary materials other than parting agents and core adhesives	EEA
Süd-Chemie	[0-5]%	**Süd-Chemie**	[0-5]%
Ashland	[0-5]%	**Ashland**	[0-5]%
Ask	[10-20]%	**Ask**	[20-30]%
New Ask	[10-20]%	**New Ask**	[20-30]%
Hüttenes-Albertus	[20-30]%	Hüttenes-Albertus	[30-40]%
ACMOS	[10-20]%	Furtenbach	[0-5]%
Foseco	[0-5]%	Cavenaghi	[0-5]%
Achem	[0-5]%	Foseco	[10-20]%
Others	[30-40]%	Others	[20-30]%

75. As Table 6 shows, the combined market shares of ASK and Ashland in these potential markets market add-up to [10-20]% and [20-30]% with an overlap of [0-5]% and [0-5]% respectively. New ASK will face significant competitors such as Hütennes-Albertus, ACMOS and Foseco. Also the market investigation did not point to any concerns with respect to these markets.

3.2. Conglomerate effects

76. As the transaction enlarges to a certain extent the product portfolio offered to customers of ASK, the market investigation also aimed to clarified whether conglomerate effects may arise as a result of the transaction and whether New Ask would have the ability and incentive to foreclose as a result of its broad portfolio of products and strong competitive position in some of them.

77. Based on the results of the market investigation, it appears however that the merger is unlikely to raise concerns in this respect. The large majority of responding customers is not aware of package deals and tends to multi-source. Although roughly half of the competitors mention the existence of package deals, no competitor but one raises concerns with respect to potential portfolio effects post-merger. In fact, the portfolio of New ASK (in terms of types or categories of products) is not significantly enlarged through the transaction. Also, the two main European competitors of New ASK have already similarly broad product portfolio. Furthermore, many of the responding

customers consider already prior to the merger the merging Parties as belonging to one economic entity and consider that the concentration will not significantly change the current market structure. Thus, it can be concluded that the concentration does not lead to conglomerate effects.

VI. CONCLUSION

78. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the internal market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of the Merger Regulation.

For the European Commission,

(signed)

Joaquín ALMUNIA
Vice-President of the European Commission