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***Case No COMP/M.6542 - EASTMAN CHEMICAL  
COMPANY/ SOLUTIA***

Only the English text is available and authentic.

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

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Article 6(1)(b) NON-OPPOSITION  
Date: 24/05/2012

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EUROPEAN COMMISSION

Brussels, 24.05.2012  
C(2012) 3528

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 Where possible the information omitted has been replaced by ranges of figures or a general description.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  
ARTICLE 6(1)(b) DECISION

**To the notifying parties:**

Dear Sir/Madam,

**Subject: Case No COMP/M.6542 - EASTMAN CHEMICAL COMPANY/  
SOLUTIA  
Commission decision pursuant to Article 6(1)(b) of Council Regulation  
No 139/2004<sup>1</sup>**

1. On 16 April 2012, the European Commission received notification of a proposed concentration pursuant to Article 4 of the Merger Regulation by which Eastman Chemical Company ("Eastman", USA) acquires control of the whole of Solutia Inc. ("Solutia" or "the Target", USA), by way of purchase of shares.<sup>2</sup> Eastman is designated hereinafter as the "Notifying Party", Eastman and Solutia together as the "Parties".

**(1) THE PARTIES**

2. Eastman is active in the manufacture and supply of chemicals, plastics and fibres world-wide. Eastman's activities are divided into four business segments including: (i) Coatings, Adhesives, Specialty Polymers and Inks ("CASPI"), (ii) Fibres, (iii) Performance Chemicals and Intermediates ("PCI") and (iv) Specialty Plastics.

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<sup>1</sup> 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.

<sup>2</sup> Publication in the Official Journal of the European Union No C117, 21.4.2012, p. 8.

3. Solutia manufactures performance materials and specialty chemicals used in consumer and industrial applications. Solutia's activities are divided into three business segments: (i) Advances Interlayers, (ii) Performance Films and (iii) Technical Specialties.

## **(2) THE OPERATION AND THE CONCENTRATION**

4. On 26 January 2012, Eastman entered into an Agreement and Plan of Merger with Solutia and Eagle Merger Sub Corporation (“Eagle”), a wholly-owned subsidiary of Eastman whereby Eagle will merge with and into Solutia, with Solutia surviving the merger as an indirect wholly-owned subsidiary of Eastman. As a result of the transaction, Eastman will acquire sole control over Solutia.
5. In view of the above, the proposed transaction therefore constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

## **(3) EU DIMENSION**

6. The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 000 million<sup>3</sup> (Eastman EUR 5 157 million, Solutia EUR 1 506 million). Each of them has an EU-wide turnover in excess of EUR 250 million (Eastman EUR [...] million, Solutia 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 within the meaning of Article 1(2) of the EU Merger Regulation.

## **(4) COMPETITIVE ASSESSMENT**

### *Introduction*

7. The proposed transaction leads to a number of vertical relationships between the Parties' activities<sup>4</sup>. Eastman is active in the production of a number of products that are used downstream by Solutia in the manufacture of polyvinyl butyral (“PVB”) resin, plasticizers for use in PVB sheets and p-phenylenediamine (“PPD”) products. Only one of these vertical relationships, however, for the supply of 2-ethylhexanoic Acid (“2-EHA”) used in the manufacture of plasticizers for use in PVB sheets results in vertically affected markets<sup>5</sup>.

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<sup>3</sup> Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Consolidated Jurisdictional Notice (OJ C95, 16.04.2008, p1).

<sup>4</sup> The proposed transaction also results on horizontal overlap in ethyl acetate. As this overlap do not result in affected market under any possible market definition, this product is not further addressed in this decision.

<sup>5</sup> Eastman produces n- butyraldehyde which is upstream inputs to many chemical products including polyvinyl butyral (“PVB”) resin. Eastman also produces methyl isobutyl ketone (“MIBK”) and methyl isoamyl ketone (“MIAK”) used as an input to p-phenylenediamine (“PPD”) products. Solutia is active in

## ***A. Relevant Product and Geographic Market Definition***

### ***(i) 2-ethylhexanoic Acid ("2-EHA")***

8. 2-EHA is made from n-butyraldehyde via the oxidation of 2-EH aldehyde, though only 2% of the overall demand for n-butyraldehyde is used for the production of 2-EHA.
9. 2-EHA is used as an intermediate product in the manufacture of other products such as metal salts, synthetic lubricants, polyester products and plasticizers. Plasticizers are the only application for which Solutia uses 2-EHA.
10. The Commission has dealt with the market for carbon acids<sup>6</sup> which includes 2-EHA in previous decisions.<sup>7</sup> The Notifying Party argues that the narrowest possible market namely 2-EHA should be considered as the relevant product market.
11. Respondents to the market investigation observed that 2-EHA is used in several applications and does not need to be adapted for any of these uses. Competitors claimed that there are other substitutes for 2-EHA with similar characteristics and some producers of 2-EHA also offer these alternative products. However, customers did not consider other products substitutable for 2-EHA.
12. For the purposes of this decision, however, the precise product market definitions for 2-EHA can be left open as the proposed transaction would not raise serious doubts under any potential market definition.
13. Concerning the geographic market, the Notifying Party submits that the market for 2-EHA is EEA-wide since there are substantial differences in price and high distribution costs between the USA and the EEA.
14. Most of respondents to the market investigation indicated that there are no significant price differences across the world or regulatory barriers between EEA Member States. The majority of respondents also indicated that transport costs are not significant.
15. For the purposes of the present decision, however, the precise geographic scope of the market for 2-EHA can be left open as the proposed transaction would not raise serious doubts whether the market is considered to be EEA or global in scope.

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the production of PVB resins and PPD products. The Parties' market shares on the relevant upstream and downstream markets are relatively limited and do not lead to any vertically affected markets on the basis of the market definitions considered by the Commission in previous decisions. The market investigation in the present case did not show concerns on any of these markets. These markets are therefore not further addressed in this decision.

<sup>6</sup> There are over 1500 carbon acids (including butyric acid trimethylhexane) which are produced at multi-purpose facilities, such that a single plant can be used to produce different carbon acids, depending on the aldehyde available.

<sup>7</sup> Commission decision COMP/M. 3056 of 11 June 2003- *Celanese/Degussa/JV*.

(ii) Plasticizer for use in PVB sheets (“PVB Plasticizers”)

16. Plasticizers are organic esters added to polymers to facilitate their processing and to increase the flexibility and toughness of the final product by internal modification of the polymer molecule. Plasticizers are primarily used in the manufacture of flexible polyvinyl chloride (“PVC”), which accounts for over half of the world's plasticizer consumption.<sup>8</sup>
17. According to the Notifying Party, the most frequently plasticized polymers include PVC, PVB, polyvinyl acetate or PVA, acrylics, cellulose molding compounds, nylon, polyamides and certain copolyamides.
18. In a previous decision, the Commission has distinguished several types of plasticizers: *“There are several major types of plasticizer (based on their chemistry), including phthalates, aliphatics, epoxidized vegetable oils, trimellitates, benzoates, phosphate plasticizers and polymeric plasticizers.”*<sup>9</sup> The Notifying Party therefore considers that the narrowest product market is PVB plasticizers (i.e. plasticizers used in PVB sheet application).
19. It results from the market investigation that customers cannot switch easily between PVB plasticizers and any substitutable products and that there might be limited supply-side substitutability between the production of PVB plasticizers and other types of plasticizers.
20. With regard to the geographic market for PVB plasticizers, the Notifying Party considers that it is likely to be global in scope and in any event EEA-wide as all suppliers are active on a global basis and the transportation costs represent a small percentage of the selling price.
21. For the purposes of this decision, however, the precise product and geographic market definitions for PVB plasticizers can be left open as the proposed transaction would not raise serious doubts under any potential market definition.

(iii) PVB Sheet

22. Solutia is active in the manufacture of PVB sheet, combined PVB resins and PVB plasticizers.
23. PVB sheet is used as an adhesive interlayer for the manufacture of laminated safety glass essentially linked to the automotive industry.
24. According to the Notifying Party, PVB sheet constitutes a relevant product market since there is no real technical substitute for PVB sheet.
25. The Notifying Party considers that the geographic market for PVB sheet is at least EEA-wide and possibly global in scope as significant volumes are imported into the EEA and the transportation costs represent only a small percentage of the selling price.

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<sup>8</sup> Commission decision COM/M.5785 of 2 December 2010 - *Sun Capital/DSM Special Products*.

<sup>9</sup> Commission decision COMP/ M.5785 of 2 December 2010 - *Sun Capital/DSM Special Products*.

26. Respondents to the market investigation concurred with the Notifying Party's view that customers of PVB sheet cannot easily switch between other substitutes and specific technology would be required. The market investigation in the present case was not conclusive as regards the geographic market definition for PVB sheet.
27. For the purposes of this decision, however, the precise product and geographic market definitions for PVB sheet can be left open as the proposed transaction would not raise serious doubts under any potential market definition.

### ***B. Competitive assessment***

#### *2-EHA used in the production of PVB Plasticizers*

28. Eastman manufactures and sells 2-EHA which is used in the production of PVB plasticizers by Solutia. PVB plasticisers are in turn used by Solutia to produce PVB sheet.
29. Eastman's market share for 2-EHA in the EEA is less than [0-5]% (by capacity and consumption) and arises only through a swap agreement.<sup>10</sup> Other suppliers in this market include Perstorp ([50-60]%), Oxea ([30-40]%) and BASF ([10-20]%).<sup>11</sup>
30. Solutia's share of the merchant market for PVB plasticizers is [20-30]% on both an EEA<sup>12</sup> and world-wide level for 2011 although this is set to decrease to [5-10]% in 2012.<sup>13</sup> Most sales of PVB plasticizers are for PVB sheet production. Downstream from PVB plasticisers, Solutia's share of supply of PVB sheet at EEA level is [40-50]% and [30-40]% on a world-wide basis. However, there are several other strong competitors including Kuraray ([20-30]%), Sekisui ([10-20]%) and Dupont ([5-10]%) in the EEA as well as Chinese PVB (with a [10-20]% share world-wide)<sup>14</sup> who are also purchasing PVB plasticizers.
31. The Notifying Party submits that the transaction will not result in any foreclosure concerns since Solutia's position in relation to sales of downstream products incorporating Eastman's input is not significant.
32. It results from the market investigation that 2-EHA has a number of uses other than the production of PVB plasticisers which account for [60-70]% of use. Of this [60-70]%, in 2011, Solutia's purchases accounted for less than [0-5]% of capacity and [20-30]% of consumption worldwide or [0-5]% of capacity and [5-10]% of consumption in the EEA.

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<sup>10</sup> According to the Notifying Party, the EU's REACH legislation prevents Eastman from shipping to Europe competitively. However, Eastman provides a limited amount (about [...]metric tons) of 2-EHA in Europe through a swap agreement with OXEA, which itself produces 2-EHA in Europe.

<sup>11</sup> If the market for 2-EHA were considered to be global in scope, Eastman estimates its merchant market share at [5-10]% (by capacity) and [10-20]% (by consumption).

<sup>12</sup> [...] thousand metric tons out of a total market volume of 21.847 thousand metric tons.

<sup>13</sup> Primarily because: (i) Solutia has seen sales reduction from its [...] existing customers for PVB plasticizers (which are competitors for PVB sheets), [...]; (ii) there has been new capacity expansions by Oxea and Celanese in 2012 [...].

<sup>14</sup> Chinese PVB is present on the worldwide market with a [10-20]% share though Chinese PVB does not yet have a share on the EEA market.

Currently, Solutia sources its 2-EHA requirements from Eastman's competitor such as BASF and Perstorp.

33. During the market investigation, some 2-EHA suppliers have raised concerns with regard to the possibility to substitute sales to Solutia as a result of a shrinking merchant market for 2-EHA. However, in the light of the observations submitted by respondents to the market investigation, it must be indicated that there are sufficient alternative customers for the supply of 2-EHA, not only for use in the plasticizers but also in other applications. Besides, as the majority of the respondents to the market investigation observed, post transaction the Parties would have gained cost competitiveness.
34. Overall, the merged entity will not have the ability to successfully engage in customer foreclosure with respect to Eastman's competitors in 2-EHA. First, Solutia's requirements for 2-EHA are not particularly significant and therefore there would remain a significant customer base for actual or potential rivals to Eastman upstream. Second, Solutia is not a customer of Eastman for the supply of 2-EHA in the EEA. Even if post-merger, Solutia were to obtain all of its supplies of 2-EHA from Eastman, this would not have a significant impact on Eastman's competitors since 2-EHA can also be used for the production of other products and there a range of alternative customers for these products. Finally, the merged entity may decrease costs and provide efficiencies on the market.
35. As regards input foreclosure, it is unlikely that the merged entity would be able to foreclose its competitors downstream on the market for PVB plasticizers since it does not hold significant market power on the upstream market for 2-EHA and post-transaction a number of strong competitors would remain.
36. In view of the above, it is concluded that the proposed transaction does not raise serious doubts as to its compatibility with the internal market as regards the vertical relationship between 2-EHA and PVB plasticizers.

## **(5) CONCLUSION**

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

*For the Commission  
(signed)  
Joaquín ALMUNIA  
Vice-President*