

***Case No COMP/M.4154 -  
DEGUSSA / DOW  
(superabsorbent polymers)***

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: 20/06/2006

***In electronic form on the EUR-Lex website under document  
number 32006M4154***



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 20.06.2006

SG-Greffe(2006) D/203174

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 Where possible the information omitted has been replaced by ranges of figures or a general description.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 party

Dear Sir/Madam,

**Subject: COMP/M.4154 -DEGUSSA/ DOW (superabsorbent polymers)  
Notification of 11.05.2006 pursuant to Article 4 of Council Regulation  
No 139/2004<sup>1</sup>**

1. On 11.05.2006 the Commission received a notification of a proposed concentration pursuant to Article 4 and following a referral pursuant to Article 4(5) of Council Regulation (EC) No 139/2004 by which the undertaking Degussa AG (“Degussa”, Germany), acquires within the meaning of Article 3(1)(b) of the Council Regulation control over the Superabsorbent Polymer Business of The Dow Chemical Company (“Dow SAP business”, USA) by way of purchase of assets.
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 common market and the EEA Agreement.

#### **I. THE PARTIES**

3. Degussa AG is a German company active in the development, production, and sale of specialty chemicals. The company offers a wide range of products and is one of the leading global suppliers of Superabsorbent Polymers (“SAP”). After finalization of the recent public bid the German industrial group RAG now owns more than 95 % of the shares of Degussa. RAG does not hold individually or collectively 10 % or more of the

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<sup>1</sup> OJ L 24, 29.1.2004 p. 1.

voting rights, issued share capital or other securities in any other undertaking which is active in the production of SAP.

4. The Dow Chemical Company (“Dow”) is a company headquartered in the USA and is not controlled by any undertaking or person. Dow is active worldwide in plastics and chemicals, agricultural sciences, hydrocarbon and energy products and services.

## **II. THE OPERATION AND THE CONCENTRATION**

5. On 9 February 2006 the parties signed an Asset Purchase Agreement, by which Degussa will acquire, through its subsidiary Stockhausen GmbH, the bulk of Dow’s SAP business, including a manufacturing facility located in Germany, worldwide customer contracts and intellectual property rights. However, Degussa will not be purchasing Dow’s SAP production facilities in the US.
6. At the same time, Degussa and Dow will enter into two agreements: (i) an agreement for the acquisition of Glacial Acrylic Acid (the raw material used for the production of SAP), and (ii) a contract manufacturing agreement by which Degussa will be acquiring for a period of [...] some SAP produced by Dow’s facilities in the US (Midland plant). This agreement will expire[...].
7. The operation entails the acquisition of sole control by Degussa, over the whole of Dow’s SAP business and therefore it constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

## **III. COMMUNITY DIMENSION**

8. The transaction did not have Community dimension under either Article 1(2) or 1(3) of the Merger Regulation. In fact, Dow SAP business Community-wide turnover did not exceed 100 Million in 2005. Since the operation was reviewable under the national merger control laws of more than three Member States, on 07.03.2006 the parties submitted to the Commission a referral request pursuant to Article 4(5) of the Merger Regulation, which was transmitted to all Member States. No Member State expressed its disagreement within the period of 15 working days of receiving the reasoned submission. Therefore, the transaction is deemed to have Community dimension.

## **IV. COMPETITIVE ASSESSMENT**

9. The parties’ activities overlap only in the market for Superabsorbent Polymers (SAP).
10. There are no vertical effects stemming from the transaction as Degussa acquires control within the meaning of the Merger Regulation only over SAP facilities and contracts of Dow. The upstream supply of Glacial Acrylic Acid (GAA) is ensured by the contract between Degussa and Dow. Consequently, GAA business stays with Dow and there is no change of control as regards the upstream GAA market.

### **RELEVANT MARKETS**

#### **Relevant product market**

11. The only relevant product market affected by the transaction is the market for Superabsorbent Polymers (SAP). According to the parties, there are currently no products that can be regarded as sufficient substitutes for SAP. This view has been

confirmed by all the customers who responded to the market test. SAP's distinctiveness lies in its capacity to absorb and retain large volumes of water and aqueous solutions. SAP is primarily used in hygienic and personal care products, such as disposable diapers, feminine hygiene products and incontinence pads. These uses make up approximately 97% of the SAP use.

12. The remaining SAP is used in agriculture, packaging materials, technical applications and other areas. All the customers' replies in the market test indicated that SAP for these applications has different characteristics and is not interchangeable with SAP for hygienic and personal care products. However, as SAP for these applications represents only 3% of the total SAP volume, the existence of a specialised producer for such SAP would not be efficient and it is produced by the established SAP producers. Therefore, taking into account the high degree of supply side substitutability, it is not appropriate to define a separate market for different uses of SAP.
13. SAP is not a fully homogeneous product. Different SAP grades exist according to quality parameters. According to the quality of SAP, the parties identified two broad categories of SAP. Only the market leaders are able to produce the higher quality product as quality is achieved by investing in product research and development and by upgrading production facilities regularly. In the EU, Degussa, BASF and Nippon Shokubai are considered to be the producers that offer the best quality SAP. On the other hand, the smaller producers such as Dow cannot, according to the parties, produce these technologically advanced SAP products. Some customers (including the two key SAP customers representing around 50% of the global demand) confirmed the view that Dow's SAP is not interchangeable with Degussa's one, as the former is of inferior quality.
14. The parties argue that existence of these two broad SAP categories does not lead to definition of separate markets. The results of the market investigation were not clear on this point<sup>2</sup> and it seems that substitutability of different grades of SAP depends on the production processes and preferences of individual customers. However, while Degussa is focused on producing high quality SAP, Dow is rather considered to be a lower quality SAP producer. Therefore, in case two separate markets according to the quality grade are defined, the transaction would lead to no or only marginal overlaps between the parties.

*Conclusion on SAP relevant product market*

15. In light of the above, the relevant product market can be defined as the market for SAP, which may possibly be further subdivided into two separate markets for higher and lower quality SAP. However, for the purposes of this decision the exact product market definition can be left open as the transaction does not lead to competition concerns under any alternative market definition.

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<sup>2</sup> Almost 80% of the customer replies received to the Article 11 letter dated 19 May 2006 agreed with the distinction into higher and lower quality SAP, however more than 60% of the replies still regarded the SAP of Degussa and Dow as interchangeable, despite falling into different quality categories.

## **Relevant geographic market**

16. The parties submit that the geographic scope of the SAP market is world-wide. Their arguments in favour of a worldwide geographic market are the following: (i) low transportation costs<sup>3</sup>, (ii) the SAP prices in different areas do not differ substantially, (iii) absence of regulatory barriers, (iv) existence of substantial trade flows between different world regions<sup>4</sup>, (v) absence of national preferences, (vi) presence of global SAP producers with global strategies and a global reach from their plants, and (vii) presence of global customers with global purchasing strategies.
17. Most of the arguments of the parties were largely confirmed by the market investigation. All the respondents to the market investigation confirmed that the geographic market for SAP is to be regarded as world-wide. The market investigation also confirmed that the major SAP producers and customers are global companies with plants throughout the world. However, a number of customers within the EEA<sup>5</sup> also pointed out that, if possible, they have preference to source SAP from producers within the EEA in order to minimise logistic costs, achieve optimal sourcing and ensure security of supply.

### *Conclusion on SAP relevant geographic market*

18. In the light of the above, the geographic market for SAP can be defined as world-wide or at least EEA-wide. However, for the purposes of this decision it can be left open whether the geographic market is world-wide or EEA-wide as the transaction does not lead to competition concerns under any alternative market definition.

## **COMPETITIVE EFFECTS**

### *Non-coordinated effects*

19. According to the data provided by the parties, Degussa is at present the leading world supplier of SAP with almost [25-30]% market share measured in volume of SAP supplied. BASF follows Degussa closely with a market share slightly above 25%. The combined worldwide market share of Degussa and Dow was [30-35]% in 2005. Therefore the addition of market share brought by Dow SAP business would be around [5-10]%. However, this includes the Midland facility of Dow that Degussa is not acquiring<sup>6</sup>. In case only the part of the Dow business permanently acquired by Degussa is taken into account, the combined worldwide market share of the parties in 2005 amounts to [25-30]%, with Degussa contributing [25-30]% and Dow [0-5]%. It must be further noted that there are fluctuations in market shares of the main competitors from one year to another<sup>7</sup>.

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<sup>3</sup> The transport prices between Europe and Japan constitute only 3.4% of SAP's production costs

<sup>4</sup> In 2005, Asian producers shipped over 100 thousand tons of SAP into Europe, the total size of the European market being 424 thousand tons.

<sup>5</sup> Around 50% of the customers replies received to the Article 11 letter dated 19 May 2006.

<sup>6</sup> The parties have concluded a contract manufacturing agreement by which Degussa will acquire SAP produced by Dow at Midland. This agreement will expire at the latest on[...].[...].

<sup>7</sup> For example in 2004 BASF was the world leader with market share around [25-30]% and Degussa came second with approximately [25-30]%.

20. In the possible narrower geographic market limited to the EEA, the combined market share of the parties was [32-37]% (by value) and [32-37]% (by volume) in 2005<sup>8</sup>. This makes Degussa/Dow the second largest player, BASF being the leader with around [35-40]% market share. In terms of both value and volume, Degussa contributed around [25-30]% whereas Dow's contribution was around [5-10]%. Since almost all of Dow's sales effected in the EEA concern SAP produced in its German facility, this overlap concerns the acquired business of Dow.
21. These market share figures were largely confirmed by the results of the market investigation both as regards the world-wide and the EEA-wide market<sup>9</sup>.
22. Even though the transaction strengthens the position of Degussa as number one SAP supplier world-wide, the combined market share remains under any scenario well below 40%. The combined entity will face competition of other strong, globally active SAP suppliers, in particular BASF and Nippon Shokubai (with market share around [15-20]% world-wide and [20-25]% in the EEA), as well as a number of smaller producers with individual market shares below 7% (such as SanDia, Arkema, Sumitomo or Kolon). It should also be noted that a number of SAP suppliers are expanding their capacities with regard to the growing demand for SAP<sup>10</sup>. For example, BASF is further expanding its SAP production capacity in Europe by 60 000 metric tons annually (representing almost 15% of the current total SAP market in the EEA) which should be available by 2008 at the latest<sup>11</sup>.
23. Further, the mere addition of the parties' market shares in 2005 over-states their combined market position. As was confirmed by replies of some key customers, Dow's competitiveness in the market is declining due to insufficient investments into its production plants and its products are considered to be of lower quality than those of its major competitors. In 2004 and 2005, Dow lost most of its contracts with the two leading buyers [...] and [...] as well as some other smaller customers. The market investigation confirmed that, in particular for major customers (including [...] and [...]), Dow's SAP is not a close substitute to the higher quality SAP produced by Degussa, BASF and Nippon Shokubai. Some customers (including two market leaders) even pointed out that the transaction may have a beneficial effect as it ensures that the Dow's assets remain in the market and will be upgraded by investments of Degussa to improve the quality and reliability of SAP production in these currently technologically less advanced facilities.
24. Moreover, almost all customers have multiple sourcing strategies and they are likely to reduce their purchases from the combined Degussa/Dow in order to maintain wider portfolio of suppliers.
25. Furthermore, buyer power of the key customers represents another countervailing factor eliminating the possibilities of the combined entity to exercise any market power. The

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<sup>8</sup> As the market shares in the SAP market are largely the same both based on value and on volume, in the following the market shares provided are based on volume as the data are more readily available than in case of value figures.

<sup>9</sup> The market shares of the parties and their competitors calculated on the basis of data provided by individual customers and competitors in the market test largely corresponded to the market share estimates of the parties.

<sup>10</sup> The parties estimate the annual growth of the SAP market at between 5 and 7%, which has been largely confirmed by the market investigation.

<sup>11</sup> See press release of BASF of 22 March 2006 "BASF increases capacities to meet growing demand"

two key customers –[...] and [...] account for more than 50% of the global SAP demand. Degussa's sales to those customers amount to approximately [...] % of its SAP sales in the EU and [...] % world-wide.

26. These large and sophisticated customers would be able to switch to other SAP suppliers or even sponsor entry of a new supplier in response to price increase or quality deterioration of Degussa's SAP. High quality SAP is an essential component for hygienic and personal care products determining to a large extent their functional quality (i.e. capacity to absorb and retain liquid). Therefore, suppliers of SAP are carefully selected in the competitive tendering procedures and inadequate SAP suppliers are replaced by others (as illustrates the example of Dow in the recent years). Ability and willingness of customers to switch between different SAP producers in response to price or quality changes was also confirmed in the market investigation<sup>12</sup>.
27. Taking into account the above, the transaction does not raise serious doubts as to its compatibility with the common market due to non-coordinated effects under any possible market definition.

#### *Coordinated effects*

28. As regards possible coordinated effects, the addition of Dow's market share to the market position of Degussa does not change the market structure significantly in order to increase the likelihood of coordination between the major SAP producers. Even though Degussa, BASF and Nippon Shokubai would together represent around 75% of the world-wide market and more than 90% of the EEA market, the market investigation did not bring any indication of possible coordination.
29. The three major SAP suppliers are not symmetric as regards market shares or vertical integration into the upstream acrylic acid production<sup>13</sup>. The SAP market is quickly growing and rather non-transparent with individual negotiations between customers and their suppliers. The SAP cannot be regarded as commodity product as it is delivered in different grades with various specifications for different customers. Innovation and R&D play a key role in particular in case of higher quality SAP produced by these major suppliers. Further, the contracts for SAP supplies are rather long term ranging between 1 to 7 years and based on competitive tendering procedures while spot purchases play only very marginal role. As described above, the key customers have significant buyer power and would be able to counter any coordination e.g. by means of sponsoring a new entrant into the SAP market.
30. Taking into account the above, the transaction does not raise serious doubts as to its compatibility with the common market due to coordinated effects under any possible market definition.

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<sup>12</sup> Around 65% of customer replies received to the Article 11 letter dated 19 May 2006 indicated that they have switched between SAP suppliers at least once in the last 5 years.

<sup>13</sup> While Degussa is not fully vertically integrated (purchases of acrylic acid comes from its 50/50 joint venture with Rohm + Haas Company and it thus cannot decide independently about its acrylic acid production and capacities), BASF is fully vertically integrated upstream.

## V. CONCLUSION

31. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of Council Regulation (EC) No 139/2004.

For the Commission  
(signed)  
Neelie KROES  
Member of the Commission