

***Case No COMP/M.3910 -  
ROCKWOOD / SÜD-  
CHEMIE***

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: 13/12/2005

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 13.12.2005

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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.3910 - ROCKWOOD/ SÜD-CHEMIE  
Notification of 08/11/2005 pursuant to Article 4 of Council Regulation  
No 139/2004<sup>1</sup>**

1. On 8/11/2005, the Commission received a notification of a proposed concentration pursuant to Article 4, following a referral pursuant to Article 4(5) by which the undertaking Rockwood Specialties Group, Inc. ("Rockwood", USA) controlled by Kohlberg Kravis Roberts & Co. L.P. ("KKR", USA) acquires sole control over the rheological additives and carbonless clay businesses (Sold Businesses) of the undertaking Süd Chemie AG (Süd-Chemie, Germany) by way of purchase of assets.

**I. THE PARTIES**

2. **Rockwood** is a global chemicals business active in the manufacture of specialty chemicals and advanced materials for use in a wide range of industries, including construction, semi-conductor production, consumer products and general industrial sectors. Rockwood is ultimately controlled by the private equity firm KKR.
3. **Süd-Chemie** is a specialty chemistry producer specialised in the manufacture of absorbents and catalysts. The present operation relates only to the rheological additives and carbonless clay businesses of Süd-Chemie.

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

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

4. The parties concluded an asset purchase agreement, under which Rockwood and its subsidiaries will acquire the Sold businesses. The rheological additives business comprises manufacturing facilities at Moosburg, Germany and Louisville, Kentucky, USA, contracts, inventory, intellectual property, employees, goodwill and various other assets and liabilities held by Süd-Chemie and its subsidiaries. The carbonless clay business comprises intellectual property, contracts, inventory, goodwill and various other assets and liabilities related to the sale of carbonless clay by Süd-Chemie and its subsidiaries but no manufacturing facilities.
5. Thus, the operation constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

## **III. COMMUNITY DIMENSION**

6. The concentration does not meet the thresholds set out in Articles 1(2) and 1(3) of the Merger Regulation. However, since the operation was reviewable under the national merger control laws of 11 Member States, Rockwood submitted a Reasoned Submission in pursuance of Article 4(5) of EC Regulation No 139/2004 to ask a referral of the concentration to the Commission. The Member States were consulted and did not oppose the referral of the concentration to the Commission. Therefore the case is deemed to have a Community dimension.

## **IV. COMPETITIVE ASSESSMENT**

### **A. Relevant product markets.**

#### ***(i) rheological additives***

7. Rheological additives are substances that affect the deformation and flow properties of the preparations to which they are added by acting as thickening or suspensory agents. They are used across a range of industries including paint, inks, cosmetics and adhesives.
8. The parties consider that the markets for rheological additives should be defined on the basis of the technology of the application in which the rheological additive is used and therefore submit that separate markets exist for rheological additives for water-based applications and rheological additives for solvent-based applications. The parties do not consider it appropriate to further subdivide these two markets according to the chemistry groups (e.g. cellulosic, polymer/synthetic, inorganic, etc.) since they submit that a high degree of substitution exists between these chemistries. Indeed the parties submit that individual chemistries are not industry- or application-specific and can be used in a variety of applications.
9. The market investigation carried out by the Commission has generally confirmed that there was no need to further segment the markets by chemistry. However, the question whether the market for rheological additives should be further sub-divided by chemistry can be left open as the notified transaction would not raise serious doubts on any possible market definition.

*(ii) carbonless developers*

10. Carbonless clay is one of the applications of acid-activated clay and is used as a developer in the manufacture of carbonless paper. Carbonless paper is intended for the duplication of documents, and comprises a paper base to which layers of chemical products are applied. The top layer of carbonless paper holds microcapsules, which contain colour formers. As pressure is applied to the paper, the microcapsules burst, and the released colour formers are absorbed through to a layer below coated with a reacting agent. The agent reacts with the colour formers to produce a sharp image.
11. The active ingredient within this reactive coating layer is the carbonless developer, which may be one of three types: carbonless clay<sup>2</sup>; phenolic resin<sup>3</sup>; salicylate<sup>4</sup>. The parties both produce a clay-based form of carbonless developer.
12. The parties submit that in terms of function, performance, cost-in-use and method of application, there is no significant difference between carbonless developers. In particular, the end-user of carbonless paper cannot discern the type of developer used in the production process. The developers are applied in a similar way within the carbonless paper production process, which according to the parties leads to the conclusion that it is relatively simple for carbonless paper manufacturers to switch between the technologies. Therefore they submit that the relevant product market is to be defined as comprising all different kinds of carbonless developers.
13. The results of the market investigation do not exclude the possibility of such substitution but the information submitted by the parties to the transaction and third parties is not sufficient to define the extent of substitutability. In fact, respondents to the market investigation indicated a number of factors which may limit the potential switch from carbonless clay to other kinds of carbonless developers.
14. This switch requires to adapt the production process and in particular the recipe involving the carbonless developers and the other ingredients (colour formers and oils) that are used in the production of the carbonless paper. This change could require different trials that could take between 6 to 9 months. In terms of plant structure, the carbonless paper manufacturer would need to invest in a new storage facility as, contrary to the carbonless clay which is applied in solid form, the other two developers are delivered in a liquid form. The majority of the respondents highlighted that switching from carbonless clay to phenolic resins or salicylates represents a risk that

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<sup>2</sup> This is the oldest type of developer and is an industry-specific application of acid-activated clay. Its use still accounts for approximately 23% of worldwide consumption of developer, principally in Europe.

<sup>3</sup> This is an organic alkylphenolic resin, such as para-octyl phenol, and is the most common type of carbonless developer, used in the production of approximately 58% of the worldwide supply of carbonless paper. It is the preferred carbonless developer in the US and is also used by one of the larger European carbonless paper manufacturers.

<sup>4</sup> Salicylates, often based on zinc, are used in the production of approximately 19% of carbonless paper supplies globally. Salicylates are used principally in Japan, although they have made in-roads with carbonless paper manufacturers elsewhere in Asia, and are also used in Europe by M-Real. Since the expiry of the original patent over zinc salicylate in the early 1990s, the raw material cost of salicylates has come down, making their use a more attractive option for carbonless paper manufacturers. Producers of salicylates include Mitsui and Sanko. Schenectady is also believed to be entering production at its facility in China.

the manufacturers may be discouraged to take in a context of steady decline of the carbonless paper industry.

15. However, for the purposes of the analysis of the present transaction the relevant product market definition may be left open since this would not alter the conclusions of the competitive assessment.

## **B. Relevant geographic markets**

### ***(i) rheological additives***

16. The parties consider that the markets for rheological additives present characteristics of a global market (e.g. very low transportation costs, absence of regulatory barriers). They also underline that each of them supplies customers all over the world from two factories located in the USA and Europe. However the parties submit that other factors, such as regional preferences towards water-based rheological additives versus solvent-based or different prices on a regional basis, could point towards a narrower dimension, e.g. EEA-wide. This has been largely confirmed by the market investigation. However the precise geographic market definition can be left open, as no competition problems would arise under either a worldwide or an EEA-wide definition.

### ***(ii) carbonless developers***

17. On the basis of similar consideration, in particular very low transport costs, absence of tariffs barriers and evidences of significant trade flows, the parties consider also the market for carbonless developers to be at least EEA-wide, and possibly world-wide. The market investigation has confirmed that the geographic scope of the carbonless developers is at least EEA-wide. However, for the purpose of the analysis of the present transaction the precise definition of the relevant geographic market may be left open.

## **C. Competitive assessment**

### ***(i) rheological additives***

18. On the basis of markets for rheological additives for water-based and solvent based applications, the parties' market shares would be below 15% at both EEA and world-wide level. If the market was defined at the level of chemistry groups, the only chemistry group where the parties' products overlap would be "inorganics" where the parties would have a combined market share of [15-25]<sup>5</sup> (Rockwood, [10-15]%; Sold Business, [5-10]%) at EEA level and [15-25]% (Rockwood, [10-15]%; Sold Business Süd-Chemie, [5-10]%) at world-wide level. In light of these markets shares and the existence of several competitors (Degussa, Elementis, Cabot Corp, Wacker-Chemie and Bentec), the transaction does not give rise to competition concerns on any hypothetical rheological additives market.

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<sup>5</sup> All the market share data used in the decision refer to the year 2004.

*(ii) carbonless developers*

19. On the market for carbonless developers including all carbonless developers, the parties' combined market share would be [20-30]% (Rockwood [15-20]%; Sold Businesses [5-10]%) at world-wide level and [50-60]% (Rockwood [35-40]%; Sold Businesses [15-20]%) at EEA level. On the EEA market for carbonless clay developers, further to the exit of Misuzawa from the European market in 2004, the parties would remain the only producers of clay-based developers. At a world-wide level the parties would have a combined market share of [85-95]% (Rockwood [60-65]%; Sold Businesses [30-35]%).
20. On the basis on a hypothetical market for all carbonless developers, the parties submit that despite their significant market shares, the proposed transaction is not likely to result in any competition concerns.
21. First, on the basis of a world wide market for all carbonless developers, the combined entity would not have a significant market share and would face competition from competitors such as Sumitomo ([20-25]%) and Schenectady ([30-35]%), producing phenolics, and Mitsui ([5-10]%) and Sanko ([5-10]%), producing salicylates. Even if the market were to be considered as EEA-wide, the parties submit that the position of the new entity on the carbonless developers market does not confer them any market power because of the following competitive constraint.
22. The clay based carbonless developers are currently used in Europe and to a lesser extent in other regions of the world where the two other technologies are largely used. The parties submit that the clay based developers were abandoned in other regions of the world since they are the oldest and the less performing among all the developers and their costs in use are higher. In particular, it appears that almost all Japanese market has switched twice from clay to phenolics and from phenolics to salicylates.
23. In Europe, there is already evidence that phenolic resins and salicylates constitute an alternative to clay as the second largest producer of carbonless paper, the German company Koehler, has already successfully switched to phenolic resins and the fourth customer of carbonless developers, the German company M-Real is using salicylates. These two companies represent a third of the total demand of the European carbonless developers. The Commission's investigation also found evidence that other carbonless paper manufacturers outside Europe, in Turkey in particular, have been recently able to switch from clay to phenolic resins.
24. The main difficulty related to switching appears to be constituted by the necessity to test the new technology before its definitive adoption. The testing period may require some time and the company may have to face the costs deriving from not being able to serve its customers during the testing period.
25. However, when Koehler switched from clay to phenolic resins, it used one of its two paper machines as a pilot unit, while it kept the other paper machine with the clay technology until the tests were successfully finalised. The majority of other producers of clay based developers have at least two production facilities and therefore have the ability to limit the risks linked to the change of technology.
26. Furthermore, there are no patents on either salicylates or phenolics and the suppliers normally assist the customers in the elaboration of the exact formulation to be used during their production process. Even the environmental problems which initially

discouraged the use of phenolics, have in the course of the time been completely solved<sup>6</sup>.

27. Moreover, the data submitted by the parties show that there is enough currently unused production capacity to satisfy all the current consumers of carbonless clay developers who would like to switch to the other two types of developers. In fact if all European users of clay-based carbonless developers were to switch to phenolic resin or to salicylates, the demand would amount to 4,000-5,000 tonnes to be compared to a total global production capacity of several million tonnes of phenolic resin and 100,000 tonnes of salicylates.
28. Therefore if the market were to be defined as comprising all carbonless developers, it could be concluded that the present concentration would not raise any competition concern. The fact that their customers could switch to other kind of developers or threaten to do so, will constraint the parties' behaviour. As a matter of fact, given that (i) the demand side is concentrated with the five largest customers of carbonless developers representing more than 90% of the total EEA market; (ii) carbonless clay is perceived as the oldest technology and no company has switched back to clay from other kinds of developers, (iii) due to the low profitability of the carbonless paper industry it is very unlikely that there will be new entrants, therefore the parties are largely dependent on their current customers.
29. The parties submit that even on a narrower definition of the relevant product market limited to clay-based carbonless developers, where the new entity would be the sole supplier as Mizusawa exited the European market, the transaction will not give rise to competition concerns for the reasons developed below.
30. First, even though phenolics and salicylates were not considered to be part of the same market of clay developers, they would however be able to exercise a competitive constraint on the parties' behaviour. On the basis of the analysis of the internal documents of both parties, it appears in fact that the main constraint to their pricing behaviour has derived not from the other clay producers but rather from the threat that their customers could switch to another technology, namely phenolics.
31. According to the data provided by the parties, the use of phenolics presents a clear cost advantage of up to [10-15]% in comparison to the clay technology.
32. The parties submit that the bargaining power of the customers has always been very strong and that this has kept the prices significantly low in this industry and showed evidence that particularly low prices have always been obtained by their leading customer. According to the parties, the materially lower prices were the only reason preventing European customers from switching to the other technologies. That is in their negotiations, the paper mills use the threat of switching to alternative developers to drive down the prices.
33. As a matter of fact, the demand is quite concentrated since each of the parties currently sells more than 90% of its production to only three customers and around half of it to only one. Therefore, as previously explained in par.28, the parties and their customers are mutually dependent.

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<sup>6</sup> Source: LavesChemie Consulting (2005).

34. Hence, given that the other technologies have exercised already competitive constraint on the parties in the past and will continue to do so in the future, it does not appear likely that the transaction would significantly change the market situation.
35. Moreover Misuzawa, who has exited the European market because of the very low prices of developers in this market, kept its production facilities and is still serving some customers in other regions of the world. In case the prices in the EEA area were to increase, Misuzawa confirmed during the market investigation that he would have all the incentives and the ability to start selling again in Europe.
36. Furthermore, the parties submit that the carbonless developers industry is facing a steady decline given the always decreasing use of carbonless paper. The latter, being gradually and increasingly substituted by more modern duplicative means or increased electronic data usage. Global sales have fallen from just over 3 million tonnes in 1994 to around 1.9 millions tonnes in 2004. This trend is expected to continue and the decline in the consumption of carbonless paper in the EEA will be of between 4% and 6% in the next years<sup>7</sup>. As a consequence the carbonless developers industry which is driven exclusively by demand for carbonless paper will follow the same trend. This can already be seen as the carbonless developers' market size has shrunk from 38 millions EUR in the EEA in 1995 to 27 millions EUR in 2004. These figures have been confirmed by the respondents to the market investigation.
37. The market investigation has confirmed that the carbonless paper market is declining at a rate of at least 5% per annum in the EEA (and at higher rate in Western Europe) and the carbonless developers market follows the same direction. A number of competitors have exited the market and the forecasts of market development foresee a decrease in the market of 28% in 2009.
38. In the context of a declining industry, the parties submit that their operation does not respond to any market expansion strategy, but is a mere defensive measure. In fact the parties submit that if this transaction could not go ahead, also in light of the substantial increase of energy prices<sup>8</sup> in the UK, Rockwood would cease its carbonless developers production by [...]. Süd-Chemie is not in a better position. [...], the carbonless developer business has realized losses in the past [...] years. In the management's judgment the potential for cost reductions had already been exploited to a considerable extent. The medium-term option for Süd-Chemie therefore was to either discontinue or sell this product line.
39. By this acquisition, which relates as far as the carbonless developers are concerned merely to Süd-Chemie's customers' contracts<sup>9</sup>, Rockwood will be able to increase the utilisation rate of its factory in the UK from [...]. The parties submit that the recent utilisation rates are such that Rockwood's carbonless developer business would not be

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<sup>7</sup> Source: LavesChemie Consulting (2005).

<sup>8</sup> The production of carbonless developers is a very energy intensive industry. Energy costs account for around 30% of total production costs.

<sup>9</sup> After the transaction, Süd Chemie's production capacities for carbonless developers will be partly used for the manufacture of different products, partly deactivated.



sustainable in the medium-term and that the planned acquisition should improve the viability of this business by reduction of per unit costs.

40. If Rockwood were to exit the market, and to shut down its [20,000-30,000]mt plant, the carbonless developers capacity available in the EEA would be limited to that of Süd-Chemie, that is to say [10,000 – 20,000 mt] , and Rockwood's customers will probably not have any alternative left but to change production technology or to exit the market.
41. In conclusion, the competitive constraint of the other technologies which are competitive in terms of price and quality, and which are currently used by the customers to maintain low prices; the possibility of switching from clay to other technologies (already successfully completed by customers in and outside the EEA); and finally the competitive constraint arising from the possible re-entry of Misuzawa, make it very unlikely that the transaction will bring any significant change into the current market structure.
42. In view of the above mentioned factors and the likely exit of one of the parties from the market in the absence of the merger, the operation would not significantly impede effective competition as a result of the creation or strengthening of a dominant position on the market of clay-based carbonless developers in the EEA.



## **V. CONCLUSION**

43. 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)  
Danuta Hubner  
Member of the Commission