EUROPEAN COMMISSION

Brussels, 1.8.2024
C(2024) 5646 final

PUBLIC VERSION

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 Where possible the information omitted has been replaced by ranges of figures or a general description.

ICI Holding S.E.
Goetheplatz 5-7
60313 Frankfurt am Main
Germany

Subject: **Case M.11504 - ICIG / EVONIK SUPERABSORBER COMPANIES**
Commission decision pursuant to Article 6(1)(b) of Council Regulation No 139/2004[1] and Article 57 of the Agreement on the European Economic Area[2]

Dear Sir or Madam,

(1) On 1 July 2024, the European Commission received notification of a proposed concentration pursuant to Article 4 of the Merger Regulation by which ICI Holding SE ("**ICIG**" or the "**Notifying Party**", Germany) acquires within the meaning of Article 3(1)(b) of the Merger Regulation sole control of the whole of Evonik Superabsorber GmbH ("**ESG**", Germany) and Evonik Superabsorber LLC ("**ESL**", United States) (together referred to as "**Evonik Superabsorber Companies**" or the "**Target companies**") (the "**Transaction**").[3] The Transaction is accomplished by way of purchase of shares and assets.[4] ICIG and the Target companies are hereinafter referred to as the "**Parties**" or post-Transaction, the "**Merged Entity**".

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.

2 OJ L 1, 3.1.1994, p. 3 (the 'EEA Agreement').

3 OJ C, C/2024/4405, 8.7.2024.

4 The Transaction's scope also includes a real estate property in Krefeld, where one of ESG's German production facilities is located, as well as hereditary building rights' agreements regarding real estate properties in Rheinmünster and Marl, where the remaining German production facilities of ESG are located.

1. THE PARTIES

(2) **ICIG** is an industrial group, focusing on mid-sized chemical and pharmaceutical businesses. ICIG is ultimately solely controlled by Dr Achim Riemann. ICIG's acquired businesses all have origins in global chemical or pharmaceutical corporations.

(3) The **Evonik Superabsorber Companies** belong to and comprise the superabsorber business of the group Evonik Industries AG. The Evonik Superabsorber Companies are active in the development, production and sale of superabsorbent polymers, *i.e.* chemical non-soluble substances (primarily polyacrylate-based polymers) which absorb liquids and do not release them even under pressure. They are primarily used in the manufacture of diapers, hygiene articles, medical products, *etc*. In addition, their activities comprise the manufacturing and sale of acrylic acid, a precursor for superabsorbent polymers.

2. THE CONCENTRATION

(4) On 1 March 2024 the Parties entered into a Share Purchase Agreement ("SPA"), pursuant to which ICIG will acquire the entire share capital of the Evonik Superabsorber Companies in a single concentration.[5]

(5) ICIG will therefore solely control the Evonik Superabsorber Companies within the meaning of Article 3(1)(b) of the Merger Regulation

3. UNION DIMENSION

(6) The Parties have a combined aggregate worldwide turnover of more than EUR 2 500 million (ICIG: EUR […] million, ESG: EUR […] million, ESL: EUR […] million).[6] In each of at least three Member States, the Parties' combined aggregate turnover exceeds EUR 100 million (Germany: EUR […] million, France: EUR […] million, Italy: EUR […] million, Netherlands: EUR […] million). In each of these Member States, the aggregate turnover of each of at least two of the Parties exceeds EUR 25 million (Germany: ICIG: EUR […] million and ESG: EUR […] million; France: ICIG: EUR […] million and ESG: EUR […] million; Italy: ICIG: EUR […] million and ESG: EUR […] million; Netherlands: ICIG: EUR […] million and ESG: EUR […] million). The aggregate Union-wide turnover of each of these two Parties exceeds EUR 100 million (ICIG: EUR […] million, ESG: EUR […] million) and none of the Parties achieves more than two-thirds of their aggregate EU-wide turnover within one and the same Member State.

(7) The Transaction therefore has an EU dimension pursuant to Article 1(3) of the Merger Regulation.

---

5 Ancillary Agreements included in Parts B, C and D of the SPA also cover the Krefeld Property Purchase Agreement, the Hereditary Building Rights Agreement Marl, and the Hereditary Building Rights Agreement Rheinmünster, which all form part of the Transaction perimeter.

6 All turnover figures are provided for 2023.

4. OVERVIEW OF AFFECTED MARKETS

(8) The Transaction does not give rise to any horizontal overlaps.

(9) However, the Transaction gives rise to vertical links globally and in the EEA in relation to chemicals. As a result of the Parties' activities and considering all plausible product and geographic markets (as assessed in Section 5 below), the Transaction leads to the following vertically affected markets:[7] supply of phenothiazine ("PTZ") (upstream), where ICIG is active globally through its portfolio company Allessa, and acrylic acid (direct downstream market), which in turn is used as an input for superabsorbent polymers (indirect downstream market), where the Evonik Superabsorber Companies are active globally.

(10) The affected markets identified above will be the focus of the remaining sections of the present decision.

5. MARKET DEFINITIONS

5.1. Phenothiazine

(11) PTZ is an aromatic amine-based product that can take the form of prills, flakes, powder and liquid. It exhibits broad activity as an inhibitor, antioxidant and short stopping agent. It is used in different applications.[8] According to the Notifying Party, it is mostly used to prevent the polymerisation of acrylic acid[9] thereby increasing its stability during production and storage.

5.1.1. The Commission's decisional practice

(12) The Commission has not previously considered a market for PTZ.

5.1.2. Product Market

5.1.2.1. The Notifying Party's views

(13) The Notifying Party submits, that (i) other polymerisation inhibitors are alternatives to PTZ,[10] (ii) all forms of PTZ are substitutable,[11] (iii) PTZ cannot be segmented by end-use.[12]

---

7 The Transaction further gives rise to vertical relationships between (i) sodium hydroxide (NaOH or caustic soda) (upstream) and superabsorbent polymers (downstream), and (ii) potassium hydroxide (KOH) (upstream) and superabsorbent polymers (downstream). Given that the Parties' market shares remain below 30% under all plausible product and geographic market definitions in both upstream and downstream markets, these vertical relationships will not be further considered in the present decision. See Form CO, paragraphs 123 and 126.

8 PTZ can be used (i) to prevent the polymerisation of various chemicals (acrylic acid, methacrylic acid, acrylates, and vinyl compounds) and thereby increases their stability during production and storage, (ii) as an antioxidant increasing the durability of synthetic rubber and synthetic lubricating oils, (iii) as a building-block in pharmaceuticals synthesis or, (iv) as an active pharmaceutical ingredient in veterinary medicine.

9 The Notifying Party estimates that the use PTZ as stabiliser in relation to the production of acrylic acid and methacrylic acid account for 95% of PTZ demand (Form CO, paragraph 219).

10 Form CO, paragraph 87.

11 Form CO, paragraph 73.

12 Form CO, paragraph 82.

(14) Ultimately, the Notifying Party considers that the exact product market can be left open as competition concerns do not arise on any plausible product market.[13]

5.1.2.1.1. Phenothiazine as a separate product market

(15) The Notifying Party states that other polymerisation inhibitors such as hydroquinone and hydroquinone monomethyl ether ("HQME") as well as p-phenylenediamine are alternatives to PTZ because they have the same functionalities, similar cost, and quality.[14]

5.1.2.1.2. Phenothiazine sub segmentation by form

(16) The Notifying Party points out that all forms of PTZ (prills, flakes, powder and liquid) are interchangeable. All PTZ forms are used for the same purposes by the same customers.[15] The Notifying Party further submits that PTZ flakes, powder and prills[16] generally have the same chemical properties and technical specifications.[17]

(17) The Notifying Party adds that there is high degree of supply-side substitutability between PTZ forms as switching production from one form to another does not require significant cost or time.[18]

5.1.2.1.3. Phenothiazine sub segmentation by end-use

(18) The Notifying Party states PTZ cannot be segmented by end-application.[19] Customers can use PTZ for all types of applications as there is no difference between PTZ in terms of quality, functionalities, properties or costs for particular applications.[20]

5.1.2.2. The Commission's assessment

5.1.2.2.1. Phenothiazine as a separate product market

(19) The outcome of the market investigation suggests that there is a separate product market for PTZ distinct from other polymer inhibitors.

(20) The market investigation suggests that there is no demand-side substitutability between PTZ and other polymer inhibitors. While views expressed by competing manufacturers of PTZ are divided as regards the question whether it is possible to substitute PTZ with another chemical to produce acrylic acid,[21] the majority of responding customers of PTZ consider that it is not possible to substitute PTZ with

13 Form CO, paragraph 75.
14 Form CO, paragraph 87.
15 Form CO, paragraph 73.
16 The Notifying Party submits that, since none of the Parties is active in the production of liquid PTZ, it has no information about it (Form CO, paragraph 72). The Notifying Party further submits that, in any event, liquid PTZ has a minor role on the market as the majority of PTZ is sold is in the form of prills, flakes or powder (Form CO, paragraph 148). The Notifying Party only manufactures PTZ in the form of prills (Form CO, paragraph 63).
17 Form CO, paragraph 73.
18 Form CO, paragraph 242.
19 Form CO, paragraph 82.
20 Form CO, paragraph 82.
21 See responses to eRFI Questionnaire to Competitors, question C.A.2 and C.A.3.

any other chemical to produce acrylic acid irrespective of whether the acrylic acid is then used to produce superabsorbent polymers[22] or other products.[23]

(21) According to views expressed by customers, different types of polymer inhibitors seem to have different uses. This is supported by the fact that the Evonik Superabsorber Companies themselves purchase different types of polymer inhibitors to produce acrylic acid[24] and explain that different types of polymer inhibitors may be needed depending on the acrylic acid process technology used, customers' requirements, and the downstream use of the acrylic acid produced.[25]

(22) Moreover, there is a clear price difference between PTZ and other polymer inhibitors. Between 2020 and 2023, PTZ was systematically cheaper than other polymer inhibitors.[26] In 2023, the average price for a kilogram of PTZ was […]€, while the price for a kilogram of hydroquinone was […]€ and the price for a kilogram of HQME was […]€.[27]

(23) Given the above, for the purpose of this decision, the Commission considers that there is a separate market for PTZ distinct from other polymer inhibitors.

5.1.2.2.2. Phenothiazine sub segmentation by form

(24) The Commission investigated a possible sub-segmentation of the PTZ market by form: prills, flakes, powder and liquid.

(25) The investigation provided mixed results but some of them indicate the existence of a narrower PTZ prills market.

(26) On the one hand, the market investigation results suggest that theoretically any form of PTZ can be used by customers. The majority of responding customers does not consider that a specific form of PTZ is required for acrylic acid used in superabsorbents.[28] As explained by one customer: "*the preference of the customer depends on the extraction system which they are using*".[29]

(27) On the other hand, customers of PTZ located in the EEA seem to clearly prefer prills. The market investigation revealed that, in case terms of supply were degraded, a majority of responding customers purchasing PTZ prills would consider an alternative supplier of PTZ only if it produces prills.[30]

(28) This preference for PTZ prills may be linked to the safety risks posed by the use of PTZ powder and flakes. As explained by a PTZ manufacturer:

---

22 See responses to eRFI Questionnaire to Customers, question C.A.A.2.

23 See responses to eRFI Questionnaire to Customers, question C.A.A.3.

24 The Evonik Superabsorber Companies purchase hydroquinone, PTZ and HQME (Form CO, paragraph 100).

25 Form CO, paragraph 97.

26 Form CO, paragraph 100.

27 Prices are based on the average price per polymerisation inhibitor sourced by the Evonik Superabsorber Companies (Form CO, paragraph 100). The Parties could not provide the price of p-phenylenediamine as the Evonik Superabsorber Companies do not source it and ICIG does not produce it (Form CO, paragraph 102).

28 See responses to eRFI Questionnaire to Customers, question C.A.A.7.

29 See responses to eRFI Questionnaire to Customers, question C.A.A.8.

30 See responses to eRFI Questionnaire to Customers, question D.4.

(29) "*Whilst in China, flakes and powder may still be produced and used for the production of acrylic acid, this is not the case for Europe and the rest of the world, where only PTZ prills can be used due to the explosion risk of PTZ powder and flakes.*"[31]

(30) This is echoed by a customer that explains that: "*because of safety risks, all market participants in Europe only use PTZ prills.*"[32]

(31) Regarding supply-side substitutability, a majority of responding competitors consider that starting to produce PTZ prills incurs significant additional costs or risks for an existing supplier of PTZ.[33] As explained by a competitor: "*Suppliers will be willing to add a priller to the production process in case the PTZ prill price starts to increase. Installing a priller might take 12-18 months and would require an investment of ~5-10M€.*"[34]

(32) In any event, for the purposes of this decision, the question of whether the product market for PTZ should be further segmented by form can be left open, as the Transaction does not raise serious doubts as to its compatibility with the internal market under any plausible product market definitions. However, in view of the above, the Commission has undertaken its assessment considering the narrowest possible product market of PTZ prills.

5.1.2.2.3. Phenothiazine sub segmentation by end-use

(33) The market investigation was inconclusive on whether the market for PTZ can be further segmented by end application as customers[35] and competitors[36] expressed inconsistent views on whether it is possible to substitute PTZ across end applications.

(34) In any event, for the purposes of this decision, the question of whether the product market for PTZ should be further segmented by end-use can be left open, as the Transaction does not raise serious doubts as to its compatibility with the internal market under any plausible product market definitions.

5.1.3. Geographic Market

5.1.3.1. The Notifying Party's views

(35) The Notifying Party submits that the geographic market for PTZ is worldwide in scope because suppliers are usually active on a global scale, there are no trade barriers, no significant transport costs, and price levels are similar in different parts of the world.[37]

31 Non-confidential minutes of the conference call with a competitor held on 17 May 2024, paragraph 7.
32 Non-confidential minutes of the conference call with a customer held on 16 May 2024, paragraph 7.
33 See responses to eRFI Questionnaire to Competitors, question C.A.9.
34 See responses to eRFI Questionnaire to Competitors, question C.A.10.
35 See responses to eRFI Questionnaire to Customers, question C.A.A.5.
36 See responses to eRFI Questionnaire to Competitors, question C.A.5.
37 Form CO, paragraph 77.

(36) Furthermore, the Notifying Party argues that the market definition can be left open as the Transaction does not give rise to competition concerns on any geographic market.[38]

5.1.3.2. The Commission's assessment

(37) The market investigation provided mixed results on conditions of competition between the EEA and the rest of the world.

(38) A majority of responding competitors[39] and customers[40] consider that there is no difference in quality of PTZ between the EEA and the rest of the world. In addition, while a majority of responding customers[41] consider that a local presence is necessary to supply PTZ in the EEA, a majority of responding competitors do not.[42] A majority of responding competitors[43] and customers[44] explain that there is a price difference for PTZ between the EEA and the rest of the world. One customer explains that Asian producers "*could be up to 10% cheaper. However, in this comparison only the raw material price is considered, we expect an equal price level after considering total costs (incl. freight, duty, etc.).*"[45] Responding competitors` views are split on whether prices of PTZ in the EEA evolved in a different way compared to prices in the rest of the world. [46] A couple of customers mention such an evolution[47] citing notably that "*prices for 2022 have developed in different directions, due to the significant energy costs in Europe*."[48]

(39) The market investigation revealed that there are limited barriers to entry into the EEA. A majority of responding competitors[49] and customers[50] cite transport costs and regulation[51] as barriers to entry into the EEA. Respondents expressed mixed views on import duties: the majority of responding competitors[52] consider them as a barrier to entry but responding customers[53] do not. Competitors and customers do not consider that there are other barriers to entry: patents, quotas or otherwise.[54]

38 Form CO, paragraph 80.
39 See responses to eRFI Questionnaire to Competitors, question C.B.1.
40 See responses to eRFI Questionnaire to Customers, question C.A.B.1.
41 See responses to eRFI Questionnaire to Customers, question C.A.B.1.
42 See responses to eRFI Questionnaire to Competitors, question C.B.1.
43 See responses to eRFI Questionnaire to Competitors, question C.B.1.
44 See responses to eRFI Questionnaire to Customers, question C.A.B.1.
45 See responses to eRFI Questionnaire to Customers, question C.A.B.1-2.
46 See responses to eRFI Questionnaire to Competitors, question C.B.1.
47 See responses to eRFI Questionnaire to Customers, question C.A.B.1.
48 See responses to eRFI Questionnaire to Customers, question C.A.B.1-2.
49 See responses to eRFI Questionnaire to Competitors, question C.B.4.
50 See responses to eRFI Questionnaire to Customers, question C.A.B.4.
51 Respondents notably cite the requirement to register their product imposed by Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as a barrier to entry (see responses to eRFI Questionnaire to Customers, question C.B.4-2; and responses to eRFI Questionnaire to Competitors, question C.B.4.).
52 See responses to eRFI Questionnaire to Competitors, question C.B.4.
53 See responses to eRFI Questionnaire to Customers, question C.A.B.4.
54 See responses to eRFI Questionnaire to Customers, question C.B.4-2; and responses to eRFI Questionnaire to Competitors, question C.B.4.

(40) In addition, as explained by a competitor, "*the PTZ business is a global business, and every market player acts at global level*".[55] This is confirmed by the market investigation as a majority of responding competitors supply PTZ to customers across the world,[56] and customers purchase PTZ from suppliers across the world.[57]

(41) In conclusion, while there are indications that the PTZ market is global in scope, for the purposes of this decision and in light of the above, the Commission considers that the geographic market for PTZ can be considered to be at least EEA-wide.

5.2. Acrylic Acid

(42) Acrylic acid is a raw material used in the production of various products such as polyacrylic acid, plastics, coatings, adhesives and synthetic resins. There are different types of acrylic acid: crude acrylic acid ("CAA"), glacial acrylic acid ("GAA") and acrylate esters. CAA is an intermediate product that is further processed into either GAA or acrylate esters. GAA is used in the manufacture of a number of products including superabsorbent polymers.

5.2.1. The Commission's decisional practice

(43) The Commission has previously defined a market for acrylic acids in which it considered a further segmentation between CAA, GAA and acrylic esters.[58]

(44) The Commission considered the scope of the geographic market for GAA to be no wider than the EEA, but ultimately left the geographic market definition open.[59] The geographic scope for CAA was also left open as no merchant market could be identified.[60]

5.2.2. Product Market

5.2.2.1. The Notifying Party's view

(45) The Notifying Party submits that the exact product market definition can be left open because the Transaction does not lead to competition concerns irrespective of the product market.[61]

5.2.2.2. The Commission's assessment

(46) Nothing on the Commission's file contradicts its previous findings that there could be a separate market for acrylic acid. In addition, the majority of responding customers agree with the market segmentation between CAA, GAA and acrylic esters,[62] and consider that GAA can be substituted across applications.[63]

---

55 Non-confidential minutes of the conference call with a competitor held on 17 May 2024, paragraph 9.
56 See responses to eRFI Questionnaire to Competitors, question C.B.2.
57 See responses to eRFI Questionnaire to Customers, question C.A.B.2.
58 M.5424 – *Dow / Rohm and Haas*, 8 January 2009, paragraph 10. Since the Parties do not produce acrylate esters (Form CO, paragraph 132), they will not be discussed further.
59 M.5424 – *Dow / Rohm and Haas*, 8 January 2009, paragraph 22.
60 M.5424 – *Dow / Rohm and Haas*, 8 January 2009, paragraph 91.
61 Form CO, paragraph 115.
62 See responses to eRFI Questionnaire to Customers, question C.A.B.1.
63 See responses to eRFI Questionnaire to Customers, question C.A.B.3.

(47) For the purposes of this decision, the Commission will therefore consider a plausible segmentation of the market for acrylic acid between GAA and CAA.

5.2.3. Geographic Market

5.2.3.1. The Notifying Party's view

(48) The Notifying Party submits that the exact geographic market definition can be left open because the Transaction would not lead to competition concerns irrespective of the geographic market.[64]

5.2.3.2. The Commission's assessment

(49) On conditions of competition between the EEA and the rest of the world, the majority of responding customers considers that there is no difference in the quality of acrylic acid.[65] However, the majority of responding customers considers that there is a material price difference, that prices have evolved in different ways in the past, and that a local presence in the EEA is necessary.[66] Responding customers are split on whether conditions of competition otherwise differ between the EEA and the rest of the world.[67]

(50) On barriers to entry to supply acrylic acid into the EEA, the majority of responding customers considers that transport costs, regulation and import duties constitute barriers to entry, but patents and quotas are not.[68] The majority of responding customers do not consider that there are other types of barriers to entry.[69]

(51) The majority of responding customers explain that they supply acrylic acid across the EEA.[70]

(52) For the purposes of this decision, the Commission considers that the exact scope of the geographic market definition can be left open as the Transaction does not raise serious doubts as to its compatibility with the internal market under any plausible geographic market definition. The Commission will therefore carry out its assessment at the narrowest plausible geographic market, *i.e.* at EEA level.

5.3. Superabsorbent polymers

5.3.1. The Commission's decisional practice

(53) The Commission has previously defined a market for superabsorbent polymers and considered a further segmentation for higher and lower quality superabsorbent polymers.[71] It ultimately left open the product market definition[72] and whether the geographic scope is EEA or worldwide.[73]

---

64 Form CO, paragraph 115.
65 See responses to eRFI Questionnaire to Customers, question C.B.B.1.
66 See responses to eRFI Questionnaire to Customers, question C.B.B.1.
67 See responses to eRFI Questionnaire to Customers, question C.B.B.1.
68 See responses to eRFI Questionnaire to Customers, question C.B.B.4.
69 See responses to eRFI Questionnaire to Customers, question C.B.B.4.
70 See responses to eRFI Questionnaire to Customers, question C.B.B.2.
71 M.4154 – *Degussa / Dow*, 20 June 2006, paragraph 15.
72 M.4154 – *Degussa / Dow*, 20 June 2006, paragraph 15.
73 M.4154 – *Degussa / Dow*, 20 June 2006, paragraph 18.

5.3.2. Product Market

5.3.2.1. The Notifying Party's views

(54) The Notifying Party submits that the exact product market definition can be left open because the Transaction does not lead to competition concerns irrespective of the product market.[74]

5.3.2.2. The Commission's assessment

(55) Nothing on the Commission's file contradicts its previous findings that there could be a market for superabsorbent polymers, and that it could be further segmented based on quality, i.e. higher quality superabsorbent polymers and lower quality superabsorbent polymers.

(56) For the purposes of this decision, the Commission considers that the exact scope of the product market definition can be left open as the Transaction does not raise serious doubts as to its compatibility with the internal market under any of the following plausible product market definition: (i) superabsorbent polymers overall, (ii) higher quality superabsorbent polymers and (iii) lower quality superabsorbent polymers.

5.3.3. Geographic Market

5.3.3.1. The Notifying Party's views

(57) The Notifying Party submits that the exact geographic market definition can be left open because the Transaction does not lead to competition concerns irrespective of the geographic market.[75]

5.3.3.2. The Commission's assessment

(58) Nothing on the Commission's file contradicts its previous findings that the relevant market could be either EEA-wide or global.

(59) For the purposes of this decision, the Commission considers that the exact scope of the geographic market definition can be left open as the Transaction does not raise serious doubts as to its compatibility with the internal market under any plausible geographic market definition. The Commission will therefore carry out its assessment at the narrowest plausible geographic market, *i.e.* at EEA level.

6. COMPETITIVE ASSESSMENT

6.1. Legal Framework

(60) A merger can entail non-horizontal effects when it involves companies operating at different levels of the same value chain or in closely related markets.

(61) In assessing potential vertical effects of a merger, the Commission analyses, among other things, whether the merger results in foreclosure so that actual or potential rivals' access to supplies or markets is hampered or eliminated as a result of the

[74] Form CO, paragraph 105.
[75] Form CO, paragraph 105.

merger, thereby reducing those companies' ability and/or incentive to compete.[76] Such foreclosure may discourage entry or expansion of rivals or encourage their exit. Foreclosure thus can be found even if the foreclosed rivals are not forced to exit the market. It is sufficient that the rivals are disadvantaged and consequently led to compete less effectively. Such foreclosure is regarded as anti-competitive where the Merged Entity — and, possibly, some of their competitors as well — is as a result able to profitably increase the price charged to consumers.

(62) The Non-Horizontal Merger Guidelines distinguish between two forms of foreclosure: (i) input foreclosure, when access of downstream rivals to supplies is hampered;[77] and (ii) customer foreclosure, when access of upstream rivals to a sufficient customer base is hampered.[78]

(63) In assessing both types of foreclosure, the Commission assesses whether the Merged Entity: (i) would have the ability to engage in foreclosure; (ii) whether it would have the incentive to do so; and (iii) what would be the overall impact on effective competition in the affected markets. All these criteria must be cumulatively met for foreclosure concerns to arise.

(64) On the basis of the above considerations, and for the reasons explained below, the Commission will carry out an input foreclosure competitive assessment of the proposed Transaction. Input foreclosure arises where, post-merger, the new entity would be likely to restrict access to the products or services that it would have otherwise supplied absent the merger, thereby raising its downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger.

6.2. PTZ (upstream) – acrylic acid / superabsorbent polymers (downstream)

(65) ICIG is active upstream in the supply of PTZ (prills only) in the EEA and globally, whereas the Evonik Superabsorber Companies (ESG and ECL) are active in the downstream markets of acrylic acid and superabsorbent polymers. In particular, ESG is active in the production and distribution of acrylic acid, whereas ESL is only active as a reseller of small quantities thereof. Both Target companies are active in the manufacturing of superabsorbent polymers.[79]

(66) The Evonik Superabsorber Companies use PTZ as monomer stabiliser in the downstream production of acrylic acid, which in turn is used as a raw material in the production of superabsorbent polymers.[80] Due to the integrated vertical relationship that exists between PTZ (upstream market) and acrylic acid (direct downstream market), and superabsorbent polymers (indirect downstream market), the Commission will conduct its competitive assessment taking into consideration both downstream markets.

---

76 Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings (2008/C 265/07) (hereafter the "**Non-Horizontal Merger Guidelines**"), OJ C 265, 18.10.2008, p. 6-25, paragraphs 20-29.

77 Non-Horizontal Merger Guidelines, paragraph 31.

78 Non-Horizontal Merger Guidelines, paragraph 58.

79 Form CO, paragraphs 18-19 and 111.

80 Form CO, paragraphs 60 and 83.

(67) The Parties' market shares in 2023 are presented in Table 1 below.

Table 1: Overview of affected markets

Upstream ICIG's product[81]	ICIG market share in the EEA	ICIG market share globally	Downstream Target companies' product	Target companies market share in the EEA	Target companies market share globally
PTZ overall	[30-40]%	<[20-30]%	Acrylic acid (all plausible market definitions)[82]	<[30-40]%	<[30-40]%
PTZ prills-only[83]	[30-40]%	[30-40]%			
PTZ overall	[30-40]%	<[20-30]%	Superabsorbent polymers (all plausible market definitions)[84]	<[20-30]%	<[30-40]%
PTZ prills-only	[30-40]%	[30-40]%			

(68) In light of the above, it is apparent that the Transaction gives rise to vertically affected markets, if the upstream market for PTZ was to be defined (i) EEA-wide for PTZ overall, or (ii) both worldwide and EEA-wide for PTZ prills-only. However, the Commission notes that the market shares provided by the Notifying Party with regard to the upstream PTZ market only refer to 2023 and thus, do not take into account the decision of ICIG's main competitor Syensqo to discontinue its own PTZ manufacturing plant in the United States in 2024 and to act as a distributor instead. Therefore, the market shares presented above for the upstream market(s) are only used as a proxy, and the Commission acknowledges that going forward, market share levels may vary if Syensqo loses customers during its transition to being a supplier of a third-party PTZ manufacturer in Asia. In any event, the competitive assessment of the Transaction will be conducted on the basis of the narrowest plausible market for PTZ upstream, *i.e.* PTZ in the form of prills only, and at EEA level.

---

81 Pursuant to the Notifying Party, other PTZ suppliers' market shares would be as follows: (i) PTZ overall in the EEA: Syensqo ([60-70]%); PTZ overall worldwide: Syensqo (<[20-30]%), Seiko (<[5-10]%), Hubei Pretty ([20-30]%), HaiAn Feiya ([10-20]%), Others ([5-10]%), and (ii) PTZ prills-only in the EEA: Syensqo ([60-70]%); PTZ prills-only worldwide: Syensqo ([30-40]%), Seiko ([10-20]%), Hubei Pretty ([10-20]%), HaiAn Feiya ([5-10]%) (Form CO, paragraph 150). The Commission, however, notes that the provided market shares refer to the past year (2023) and therefore do not take into account Syensqo's decision to discontinue its own PTZ manufacturing plant in the United States. Thus, going forward, market share levels may vary if Syensqo loses customers during its transition to being a supplier of a third-party PTZ manufacturer in Asia.

82 Plausible product market definitions for acrylic acid cover (i) acrylic acid overall, (ii) CAA, and (iii) GAA.

83 ICIG's market shares in the plausible product market for PTZ segmented by end-use would not materially differ from ICIG's market shares for PTZ prills in the EEA and globally. See the Notifying Party's Response to RFI 6 of 19 July 2024.

84 Plausible product market definitions for superabsorbent polymers cover (i) superabsorbent polymers overall, (ii) higher quality superabsorbent polymers, and (iii) lower quality superabsorbent polymers.

(69) In addition, the Commission notes that the Transaction is not likely to give rise to customer foreclosure, given (i) the Evonik Superabsorber Companies' limited market shares under all plausible product and geographic markets downstream, and (ii) the already existing pre-Transaction long-term [90-100]% purchase agreement between the Target companies and ICIG for the supply of PTZ. Therefore, customer foreclosure will not be further assessed, and the present decision will focus on input foreclosure.

6.2.1. The Notifying Party's views

(70) *First*, the Notifying Party submits that the Merged Entity would not have the ability to engage in input foreclosure because PTZ only represents a very minimal cost factor in relation to the price of the downstream products. In addition, the Notifying Party argues that ICIG's market share upstream would be relatively limited at worldwide level, while there are plenty of alternatives for customers, including other suppliers with available capacity, other chemicals, such as hydroquinone, HQME or p-phenylenediamine, or just other forms of PTZ.

(71) *Second*, the Notifying Party submits that the Merged Entity would not have the incentive to stop supplying PTZ since the Target companies' margins downstream would be too low (even though they are higher than the upstream margins) and their market position too limited to make an input foreclosure profitable. The Notifying Party further submits that any foreclosure strategy would not make commercial sense, given that the Target companies' demand of PTZ is already covered by ICIG and is too limited to balance the losses and to sustain a commercially reasonable utilisation of its PTZ production of at least […].[85]

(72) *Third*, the Notifying Party submits that a potential input foreclosure strategy would have no impact on the downstream markets as there is a lot of actual and expected available capacity on the upstream market for PTZ, mostly coming from Asian suppliers.

6.2.2. The Commission's assessment

(73) For the reasons set out below, the Commission considers that, whilst it is unclear whether the Merged Entity would have the incentive to adopt an input foreclosure strategy with regards to acrylic acid and superabsorbent polymers, it would not have the ability to do so and, in any event, such an input foreclosure strategy would not have an impact on effective competition on the downstream markets.

6.2.2.1. Ability

(74) Input foreclosure may raise competition problems only if it concerns an important input for the downstream product. This is the case, for example, when the input concerned represents a significant cost factor relative to the price of the downstream product. Irrespective of its cost, an input may also be sufficiently important for other reasons. For instance, the input may be a critical component

[85] Almost […] of ICIG's upstream sales of PTZ in the EEA and more than […] of its global sales are currently intended for customers other than the Target companies. Even so, ICIG's overall capacity utilisation rate in 2023 was considerably low, at approximately […]. Hence, ICIG would be unlikely to sustain a commercially reasonable utilisation rate of at least […] for its PTZ production only for the Target companies' consumption. See Form CO, paragraph 171.

without which the downstream product could not be manufactured or effectively sold on the market.[86]

(75) In this respect, the Commission *firstly* notes that PTZ does not appear to represent a significant cost factor in relation to the price of the downstream product, yet it is a critical component in terms of functionality. For example, based on the internal data submitted by the Evonik Superabsorber Companies, PTZ only accounts for […] of the total cost breakdown of ESG's own production of acrylic acid.[87] In the same vein, the majority of customers replying to the Commission's market investigation has confirmed that PTZ does not represent a significant cost factor to their downstream product.[88] A competitor has also explained that "*PTZ is used at 0.10% in the acrylic acid product, so its cost impact is minimal*".[89] Nevertheless, almost all customers consider PTZ is a critical component, without which acrylic acid could not be manufactured.[90]

(76) *Secondly*, while the Commission notes that ICIG's portfolio company Allessa appears to be the most credible supplier for customers in the EEA, it also observes that Syensqo and Seiko both appear to be strong close competitors being able to restrain Allessa's behaviour in the upstream market for PTZ. With regard to Syensqo in particular, and in view of the discontinuation of its own manufacturing earlier in 2024, the Commission cannot exclude that, in the near future, Allessa may gain a higher market share than the one it currently has. However, the Commission also notes that Syensqo is not exiting the market but rather explained that it "*will now source PTZ products from a partner in Asia and will deliver to all markets around the world*".[91] "*Syensqo sees this partnership as a long term solution to be able to offer PTZ as Syensqo's portfolio*".[92] In addition, the majority of customers responding to the Commission's market investigation has ranked Allessa, Syensqo and Seiko as the most credible suppliers of PTZ for EEA customers. Hubei Pretty/Kaiyuan has also been identified as following closely.[93]

(77) *Thirdly*, even in an EEA-wide market of PTZ prills, there appear to be out-of-market constraints from global suppliers. Already pre-Transaction, the majority of customers responding to the Commission's market investigation has confirmed that global suppliers that are not based in Europe, such as Syensqo, Seiko and Hubei Pretty/Kaiyuan, are strong and credible alternatives to Allessa.[94] In addition, the majority of respondents, including both customers and competitors, expects new suppliers of PTZ, and especially the ones based in Asia, to become credible alternatives for EEA-based customers within the next 2-3 years.[95]

---

86 Non-Horizontal Merger Guidelines, paragraph 34.

87 Form CO, paragraph 215.

88 See responses to eRFI Questionnaire to Customers, question D.3-1.

89 Response of competitor to eRFI Questionnaire to Competitors, question E.1-2.

90 See responses to eRFI Questionnaire to Customers, question D.3-2.

91 Response of competitor to eRFI Questionnaire to Competitors, question B.1.

92 Non-confidential minutes of the conference call with the competitor held on 17 May 2024, paragraph 5.

93 See responses to eRFI Questionnaire to Customers, question D.1.

94 See responses to eRFI Questionnaire to Customers, question D.1.

95 See responses to eRFI Questionnaire to Customers, question D.10; and responses to eRFI Questionnaire to Competitors, question D.7.

(78) Despite the fact that (i) customers can mainly only switch to alternative suppliers of PTZ in the form of prills,[96] and that (ii) results were mixed as to how fast and easy switching would be, with customers referring to a time range between 6 and 12 months,[97] the Commission notes that several customers have already been in contact or even qualified Asian-based PTZ suppliers.[98] As put by one customer, "[a] *viable option could be to reinforce the cooperation with our existing alternative suppliers and we would also consider as well new chinese/japanese suppliers. Switching suppliers would be challenging but not impossible to implement*".[99] Another customer also mentioned that "[w]*ith a few Chinese producers coming up with prills, there will be enough capacity and this will result in normal competition*".[100] Therefore, the Commission considers that there are out-of-market constraints from global suppliers that are able to restrain Allessa's behaviour in the upstream market for PTZ post-Transaction.

(79) *Fourthly*, the Commission's market investigation indicated that there is additional available capacity on the upstream market for PTZ. In particular, competitors replying to the market investigation have indicated that they have a low utilisation rate in their PTZ production, namely below 60%.[101] This is similar to Allessa, which, according to the internal data submitted by the Notifying Party, only had a utilisation rate of approx. […] in 2023.[102]

(80) In that respect, one customer expressed concerns over the availability of PTZ in the near future, on the basis of two considerations: (i) some of Allessa's PTZ volumes will be shifted to cover the Merged Entity's needs for PTZ, so less PTZ will be available on the merchant market, and (ii) there will be additional volumes of PTZ lost due to Syensqo's exit from the market. In particular, the customer stated the following: "[p]*ost-transaction, there is a certain captive use of PTZ, which will be covered internally only. Less volumes available on the free market, in addition to the lost volumes in 2024 from the exit of Syensqo out of the PTZ business. The tighter market will lead to significant reduced supply capacity on the free market and thus higher overall prices*".[103] The same customer further acknowledged that "*given the limited cost share of PTZ in the production of superabsorbent polymer,* [the customer does] *not expect a direct impact of the transaction on the cost structure of superabsorbent polymer production. However,* [the customer sees] *the risk that a limitation of PTZ available on the market will have a negative impact on the superabsorbent polymer production as it is essential and non-substitutable in the production process*".[104]

(81) The Commission notes that both considerations made by the abovementioned customer are misguided. First, pre-Transaction, the Target companies already purchase [90-100]% of their PTZ needs from ICIG. Therefore, there will be no PTZ volumes currently available on the market that would be shifted to the Target companies post-Transaction. This has also been acknowledged by another market participant, noting that "*the transaction will not change the global supply / demand*

96 See responses to eRFI Questionnaire to Customers, question D.4.
97 See responses to eRFI Questionnaire to Customers, question D.6.
98 See responses to eRFI Questionnaire to Customers, question D.12.
99 Response of customer to eRFI Questionnaire to Customers, question D.5.
100 Response of customer to eRFI Questionnaire to Customers, question E.3.
101 See responses to eRFI Questionnaire to Competitors, question D.11.
102 Form CO, paragraph 171.
103 Response of customer to eRFI Questionnaire to Customers, questions E.1, E.3 and E.5.
104 Response of customer to eRFI Questionnaire to Customers, question E.1.

balance vs. today's situation. Moreover, Evonik is already sourcing its PTZ needs from Allessa".[105] Second, Syensqo's discontinuation of its own PTZ facility is not as such specific to the Transaction. In any event, however, the Commission notes that Syensqo is not exiting the market but rather "*will now source PTZ products from a partner in Asia and will deliver to all markets around the world*".[106] "*Syensqo sees this partnership as a long term solution to be able to offer PTZ as Syensqo's portfolio*".[107].

(82) *Fifthly*, the Commission's market investigation has indicated that PTZ customers enjoy a certain degree of negotiating power in relation to their PTZ suppliers,[108] with several of them deploying already today a multi-sourcing strategy "*for securing supply and price competitiveness*"[109] and for "*competition purposes*".[110] One customer in particular explained that it has negotiating power because it "*is an important PTZ customer, due to its large demand*".[111] The Commission further notes that the customers' countervailing power is also apparent from ICIG's low margins for PTZ, accounting for less than […],[112] as well as Syensqo's decision to discontinue its own manufacturing of PTZ. As Syensqo explained during the Commission's market investigation, "[t]*here is no negotiating power. In the past, being a local producer in the USA was an advantage, but this is no longer the case, as evidenced by the stopping of Syensqo's production there*".[113]

(83) On the basis of the above considerations, the Commission concludes that the Merged Entity would likely not have the ability to engage in any input foreclosure strategy post-Transaction.

6.2.2.2. Incentive

(84) Based on the inconclusive market investigation results and the profit margins data provided by the Parties, it is unclear whether the Merged Entity would theoretically have the incentive to foreclose downstream rivals for the following reasons.

(85) *First*, regarding the downstream market for superabsorbent polymers, based on the Commission's analysis of the margin data provided by the Parties, a total input foreclosure of PTZ supply upstream could be offset by a relatively small increase of superabsorbent polymers sales downstream.[114] This means that, contrary to the Parties' views, the data indicate that an input foreclosure strategy targeting

---

105 Response of competitor to eRFI Questionnaire to Competitors, question E.1.

106 Response of competitor to eRFI Questionnaire to Competitors, question B.1.

107 Non-confidential minutes of the conference call with the competitor held on 17 May 2024, paragraph 5.

108 See responses to eRFI Questionnaire to Customers, question D.2-1.

109 Response of customer to eRFI Questionnaire to Customers, question D.2-2.

110 Response of customer to eRFI Questionnaire to Customers, question D.2-2.

111 Response of customer to eRFI Questionnaire to Customers, question D.2-4.

112 Form CO, paragraph 164.

113 Response of competitor to eRFI Questionnaire to Competitors, question D.2-4.

114 See the Notifying Party's Response to RFI 5 of 10 July 2024. According to the Commission's analysis, in case of <u>total</u> input foreclosure, the Merged Entity would need to sell an extra […] kt of superabsorbents in order to break even, which does not appear to be very significant in light of ECG's* […] kt production of superabsorbents per year. The Notifying Party submits that it would not be in a position to effectively apply any targeted <u>partial</u> foreclosure strategy, since it is not aware of the (end) uses for which its customers procure PTZ (*e.g.* for the production of acrylic acid, superabsorbents or other products). See Form CO, paragraphs 220-221.

* Should read: 'ESG's'

superabsorbent polymers competitors downstream could theoretically be profitable for the Merged Entity if it reasonably increased its downstream sales.

(86) *Second*, regarding acrylic acid and superabsorbent polymers, the results of the market investigation were mixed in relation to the Merged Entity's incentive to stop supplying or otherwise degrade the terms of its supply of PTZ post-Transaction.[115] Whilst some respondents expressed concerns regarding the "*captive use of PTZ, which will be covered internally only*", the fact that "*the tighter market will lead to significant reduced supply capacity on the free market and thus higher overall prices*" and the fact that "*currently their price is already at high level*", others were comforted by the fact that "*Evonik is already sourcing its PTZ needs from Allessa*".[116]

(87) Notwithstanding the fact that ICIG already covers [90-100]% of the Target companies' PTZ demand, and this only covers a limited part of its PTZ supply, it cannot be excluded that the Merged Entity could have the incentive to engage in an input foreclosure strategy post-Transaction at least as regards superabsorbent polymers if one were to disregard the likely lack of an ability to foreclose.

6.2.2.3. Impact on effective competition

(88) In any event, any attempt by the Merged Entity to engage in input foreclosure, would likely not impact effective competition.

(89) *First*, as indicated above, there are sufficient other PTZ suppliers already active and/or expected to enter the market within the short term which are considered as credible alternatives by customers in case of an input foreclosure strategy by the Merged Entity.[117] The Commission's market investigation further pointed out that both competitors and customers expect the market for the supply of PTZ to remain sufficiently competitive post-Transaction, both in the EEA and worldwide.[118]

(90) *Second*, the majority of the respondents to the market investigation found that the Transaction will have a neutral impact on prices, quality and product availability in all related markets; (i) the upstream market for PTZ (overall and prills only) and (ii) on the downstream markets for acrylic acid and for superabsorbent polymers.[119]

6.2.3. Conclusion on input foreclosure

(91) On the basis of the above considerations, the Commission concludes that the Transaction does not raise serious doubts as to its compatibility with the internal market with regard to the vertical relationship between PTZ (upstream) and acrylic acid or superabsorbent polymers (downstream), under any plausible market definition.

---

115 See responses to eRFI Questionnaire to Customers, question D.15; and responses to eRFI Questionnaire to Competitors, question D.9.

116 See responses to eRFI Questionnaire to Customers, question D.16; and responses to eRFI Questionnaire to Competitors, question D.10.

117 See responses to eRFI Questionnaire to Customers, questions D.1.1, D1.2 and D.10; and responses to eRFI Questionnaire to Competitors, questions D.1.1, D1.2 and D.7.

118 See responses to eRFI Questionnaire to Customers, questions E.1-2; and responses to eRFI Questionnaire to Competitors, question E.1-2.

119 See responses to eRFI Questionnaire to Customers, questions E.2-5; and responses to eRFI Questionnaire to Competitors, question E.2- 5.

7. CONCLUSION

(92) 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 EEA Agreement. This decision is adopted in application of Article 6(1)(b) of the Merger Regulation and Article 57 of the EEA Agreement.

For the Commission

(Signed)
Margrethe VESTAGER
Executive Vice-President