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## Completed acquisition by Kidde Plc of Croda Fire Fighting Chemicals

The OFT's decision on reference under section 22 given on 15 March 2004

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### **PARTIES**

**Kidde Plc** (Kidde) is active worldwide in the design, manufacture, sale and installation of fire and safety products and systems, including fire detection and fire fighting products and systems. In the financial year to 31 December 2002, Kidde's worldwide turnover was £879,644,000 with sales of £83,689,000 in the UK.

**Croda Fire Fighting Chemicals** (Croda) manufactures foam equipment systems and fire extinguishing agents in the UK and in France. In the financial year to 31 December 2002, Croda's worldwide turnover was £8,602,000 of which £1,193,000 was made in the UK.

### **TRANSACTION**

Kidde has acquired Croda's manufacturing operations of fire extinguishing agents in Liverpool in the UK and in Lyon, France.

The transaction was notified by Kidde on 19 January 2004. The 40 working day administrative deadline is 15 March 2004. The merger was completed on 16 January 2004 and the statutory deadline is 15 May 2004.

### **JURISDICTION**

As a result of this transaction Kidde and Croda have ceased to be distinct. The parties overlap in the supply of foam equipment systems, fire fighting powder (powder) and fire fighting foam (foam) and the share of supply test in section 23 of the Enterprise Act 2002 (the Act) is met. The OFT therefore believes that a relevant merger situation has been created.

## RELEVANT MARKET

### Product market

The parties overlap in the supply of foam equipment systems and certain fire fighting agents (Fire Agents), namely powder and foam used to combat fires. The parties combined share of supply in the UK for foam equipment systems is 18 per cent with an increment of less than one per cent. Due to the limited change to the competitive situation the OFT does not believe that it is or may be the case that the merger has resulted or may be expected to result in a substantial lessening of competition in the supply of foam equipment systems. Therefore, these products are not discussed further.

The parties both supply powder and foam for use in portable fire extinguishers (PFEs) and in fire fighting systems. The immediate customers of powder and foam are users of fire fighting systems such as fire brigades and large petrochemical companies as well as PFE suppliers, which sell PFEs mostly to commercial organisations complying with Fire Regulations governing the work place.

The parties argue that powder and foam form part of the wider market for all Fire Agents used to combat fires which also includes CO<sub>2</sub>, H<sub>2</sub>O, and HFCs (a gaseous substance).

Information provided by the parties indicates, however, that some agents are more effective in combating particular types of fire than others. For example, both powder and foam are effective against fires involving liquid substances; whereas, powder and HFCs as opposed to foam are used in the treatment of fires involving gas.

The information also shows that there are a variety of different powder types which can be used either individually to fight fires involving metals or combined to combat fires in solid materials such as wood or paper, as well as in liquids and gases. The parties state that almost all powder manufacturers are able to and do supply the full range of different powder types as the production process and raw materials for each type are the same.

The parties' evidence also indicates that there are two types of foam: synthetic and protein. Although not all foam manufacturers produce both types, for end-users, they are substitutable.

The majority of customers contacted by the OFT indicated that foam and powder are not substitutable agents either for use in PFEs or in fire fighting systems because of their different fire fighting properties. Powder fights fire by taking the energy out of the

flame and interfering with the chemistry of combustion. In contrast, foam operates by placing a layer over the flame surface to prevent contact with oxygen.

In terms of supply-side substitution, our enquiries revealed that different equipment is required in the manufacture of powder compared with Foam. The OFT's assessment does not consider that suppliers of one could switch their existing production facilities to make the other with sufficient ease or rapidity to be considered as exerting a short-term competitive constraint.

Overall, for the purposes of this case, therefore, the most appropriate frames of reference are considered to be the supply of powder and the supply of foam.

### **Geographic market**

Kidde supplies powder from its plant in Mexico and foam from its facilities in the UK, France, Italy and Australia. Croda's powder plant is based in the UK and it supplies foam from the UK and France.

Bid data provided by the parties for contracts tendered for and won as well as the OFT's third party enquiries indicate that both powder and foam are supplied globally. The most appropriate frame of reference for the supply of both powder and foam is therefore considered to be worldwide.

## **HORIZONTAL ISSUES**

### **Market shares**

In the supply of powder, the parties submit that most PFE suppliers do not enter into formal tender processes choosing instead to approach several suppliers to discuss their requirements. In terms of price, the parties assert and our third party enquiries confirm that the price of powder has been declining over the past five years.

Data provided by the parties suggest that post merger their combined share of the worldwide supply of powder is 20-30 per cent [see note 1]<sup>1</sup> with an increment of 5-15 per cent [see note 1]. In the UK, the combined share is 40-50 per cent [see note 1] with an increment of 20-30 per cent [see note 1]. This makes them the largest supplier both worldwide and in the UK.

However, the parties maintain that share data does not reflect the true competitive situation in this sector. They argue that the loss or gain of a single contract can significantly alter share of supply figures. For example, by winning one particular UK

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<sup>1</sup> Exact figure replaced with a range.

contract under a competitive tender process, Kidde's share of supply subsequently increased by 15-25 per cent [see note 1] in the UK.

Moreover, a number of large global suppliers remain in this sector such as Tyco, Amerex, Caldic, Quimica, CECA, Ruehl, GMC and Gielle, each of which has the capacity necessary to win large contracts and can be expected to competitively constrain the parties' behaviour post merger. Further competition can also be expected from Chinese based producers as well as a number of other smaller European based manufacturers.

In the supply of foam, the parties submit that customers mostly engage in tender processes to choose their preferred supplier with the exception of smaller customers which negotiate with individual suppliers from the list price. According to the parties, UK sales of foam have declined by 20 per cent in the last year and prices have largely remained flat over the last five years.

Data provided by the parties suggest that post merger their combined share of the worldwide supply of foam is 30-40 per cent [see note 1] with an increment of less than 10 per cent [see note 1]. In the UK, the combined share is 40-50 per cent [see note 1] with an increment of less than 10 per cent [see note 1]. Kidde will remain the largest supplier both worldwide and in the UK.

However, our investigation shows that a number of other foam suppliers are able to compete for large contracts, including Solberg, Tyco, Chemguard, Gielle, Solvay, Saval, Kronenbury and Orion, and can therefore be expected to act as a competitive constraint on the parties. Competition can also be expected from emerging Chinese based suppliers and from a number of other smaller European suppliers.

Overall, customers have confirmed that in the event of a small but significant increase in the price of either Kidde's powder or foam, they would be able to switch to a number of alternative suppliers without difficulty. Some PFE suppliers expressed concerns about the costs of re-accreditation of their PFEs which is compulsory if they choose to switch supplier. This process involves resubmitting PFEs for a variety of tests in accordance with industry safety standards and issuing new fire safety certificates. The estimated cost varies with one third party suggesting that it would cost around £130,000 both for powder and foam. Another put the figure at over £20,000 which they considered to be substantial relative to the amount of powder and foam that they purchase. However, data shows that these switching costs represent less than two per cent of the PFE supplier's revenue from PFEs.

## **Barriers to entry and expansion**

Information provided during our investigation shows that to set up a powder facility would take around nine months and cost approximately £100,000. The same amount of investment would be required to build a synthetic foam plant. An additional £250,000 would be needed to establish a protein based foam plant. The parties state that the raw material required for both powder and foam is readily available worldwide. A new entrant would also have to obtain regulatory approval in the UK. The parties point out that this would be straightforward for existing US and other EU suppliers as the standards are equivalent. A small investment would be required in research and development (R&D). Kidde, for example, currently spends an average of [see note 2]<sup>2</sup> of its turnover on R&D.

The parties also suggest that large chemical companies such as [see note 2] and [see note 2] which have some existing knowledge of the fire equipment sector could begin supplying powder or foam with relative ease. This is consistent with responses from our third party enquiries.

Barriers to expansion both in powder and foam also appear to be low. The parties submit that existing powder and foam producers are operating at under-capacity and could easily increase production in response to a rise in demand.

## **Buyer power**

Customers have indicated that they possess some negotiating power in securing lower prices. In part, this is because of the wide range of powder and foam suppliers but also because of the large volumes that individual customers purchase, which incentivises competition between suppliers to secure lucrative contracts. For example, in the UK, Kidde sells powder to Chubb. This contract which is subject to a competitive tender process accounts for [see note 2] of Kidde's European sales. Croda's ten largest powder customers account for [see note 2] of their powder sales.

## **VERTICAL ISSUES**

One third party expressed concerns that the combined business would be able to use its position in the supply of powder and foam to benefit its downstream sales of PFEs and thereby foreclose the supply of PFEs in the UK<sup>3</sup>. In response, the parties submit that their estimated share of the supply of PFEs in the UK is less than 10 per cent [see note 1]. Their closest competitors are Chubb with 30-40 per cent [see note 1] and Nu with some less than 10 per cent [see note 1] of supply<sup>4</sup>. Moreover, there are over 200

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<sup>2</sup> Information excised at the parties' request.

<sup>3</sup> Croda did not supply PFEs in the UK prior to this merger.

<sup>4</sup> Figures provided by Kidde.

other independent suppliers of PFEs in the UK and 20 per cent of PFEs sold in the UK are imported from around the world. This choice enables PFE suppliers to readily switch powder and foam suppliers and given the proportion of imports of PFEs into the UK, this concern is not borne out.

The OFT has learnt that the merged entity intends to acquire Gloria-Werke H. Schulte-Frankenfeld GmbH & Co (Gloria), a German based company with a UK subsidiary, Gloria plc, which supplies PFEs worldwide and which currently supplies PFEs to Kidde for resale in the UK. However, since that merger (if it goes ahead) will take place after this merger, any potential competition effects arising from the acquisition of Gloria should be considered in the context of an OFT investigation into the Kidde/Gloria merger if it qualifies for investigation under the Act.

### **THIRD PARTY VIEWS**

The majority of customers expressed no concerns about the merger as they believe that they possess sufficient negotiating strength to resist any price increase and if not, they could switch to an alternative supplier both of powder and foam. Some customers, specifically PFE suppliers, did raise concerns about the cost of switching to another supplier and one expressed concerns about the combined business' ability to use its position in the supply of powder and foam to squeeze competitors in the PFE sector, in which it is also active, out of the market. These concerns are addressed in paragraphs 24 and 29 above.

### **ASSESSMENT**

The combined business is the largest supplier of powder and foam worldwide and in the UK. Although the merger appears to increase concentration in both sectors which may give rise to prima facie competition concerns, customers have indicated that they possess sufficient negotiating strength to resist price increases. The loss of a single large contract can significantly impact upon the parties' revenue and thus the threat of customers switching to one of a range of alternative global suppliers of both powder and foam can be expected to competitively constrain the parties' behaviour. Switching for PFE suppliers may incur some costs; however, these do not appear to represent a large proportion of their turnover.

Our investigation suggests that barriers to entry appear to be low with the possibility of chemical companies entering with relative ease. Existing suppliers could also expand production in the event of an increase in demand.

Consequently, the OFT does not believe that it is or may be the case that the merger has resulted or may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom.

## **DECISION**

This merger will therefore not be referred to the Competition Commission under section 22(1) of the Act.