

Anticipated acquisition by Chiral Technologies Europe SAS of  
Chromtech Limited

ME/3787/08

The OFT's decision on reference under section 33(1) given on 24 September 2008. Full text of decision published 1 October 2008.

---

**Please note that square brackets indicate figures or text which have been deleted or replaced at the request of the parties for reasons of commercial confidentiality.**

**PARTIES**

1. **Chiral Technologies Europe SAS (CTE)**, a French subsidiary of the global chemicals business Daicel Chemical Industries Limited, is a manufacturer and supplier of chromatography products.
2. **Chromtech Limited** (Chromtech), run by its two shareholders, Professor Hermansson and his wife, is a UK limited company based in Congleton, Cheshire. Chromtech is also active in the manufacture and supply of chromatography products. In 2007, its UK turnover amounted to around £80,000 and its worldwide turnover was around £[<5 million].

**TRANSACTION**

3. CTE proposes to acquire the entire share capital of Chromtech. The parties having notified the anticipated transaction on 1 August 2008, the administrative target date for the OFT's decision on reference is 29 September 2008.

## **JURISDICTION**

4. As a result of this transaction, CTE and Chromtech will cease to be distinct. The parties' combined share of the supply in the UK of a specific category of chromatography product, chiral columns, amounts to over 90 per cent. Consequently the share of supply test in section 23 of the Enterprise Act 2002 (the Act) is met. The OFT therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

## **MARKET DEFINITION**

5. Chromatography is a chemical process by which, typically in laboratory conditions, compounds (analytes) are separated into one or more of their component parts.
6. Chromatographic separation takes place over two distinct phases: a mobile phase and a stationary phase. It involves the analyte moving, typically in solution form, in the mobile phase through the stationary phase, which filters components from the mixture and allows for one or more of them to be isolated.<sup>1</sup>
7. The predominant chromatography technology used in the UK and elsewhere is high performance liquid chromatography (HPLC). Approximately 80 per cent of all sales of chromatography products are within the HPLC segment. HPLC systems use injectors and high pressure pumps to provide for the necessary mobile phase by generating flows of liquid analyte through the system. The key points in the stationary phase, at which the components are separated out, are contained within a high pressure steel column.

---

<sup>1</sup> An apposite analogy depicts a mixed swarm of bees and wasps (analyte) flying (mobile phase) over a flower bed (stationary phase). The wasps, not being attracted to the flowers, fly past. The distracted bees on the other hand pause to visit the flowers before flying off again. Tests at a point past the flower bed reveals evidence that the wasps passed first, followed by the bees.

8. CTE and Chromtech overlap exclusively in the manufacture and supply of a specific category of HPLC column used in the separation of chiral molecules (chiral column).
9. Chiral molecules are composed of two conjoined parts (enantiomers). Each enantiomer is commonly designated 'right-handed' and 'left-handed', the one being virtually an exact three dimensional mirror copy of the other.<sup>2</sup> However, when separated from the original chiral molecule, one enantiomer may have different physical and chemical properties from its mirror copy.
10. Many biologically active molecules, including some enzymes and amino acids, are chiral. Certain drugs are also made from chiral molecules that must be separated to within a high degree of purity of one enantiomer, due to the potentially adverse side-effects of the other.
11. Chiral chromatography has applications in the pharmaceutical, chemical and agricultural industries.

### **Product scope**

12. On the demand side, the OFT considers that there is virtually no scope for substituting achiral HPLC columns for chiral HPLC columns. The parties submit that chiral chromatography is the most effective method (achiral techniques being largely ineffective) for chiral compound separation.
13. On the supply side, the parties submit that there is a good case for meaningful supply-side substitution in that companies well established in the manufacture of achiral HPLC columns are increasingly active in chiral chromatography. A body of third party comment corroborates the parties' assertion that the major factor facilitating entry (by firms such as Sepaserve, Knauer, EKA, Macherey Nagel, Regis, Fuji Chemical, ZirChrom and Phenomenex) into manufacture and supply of chiral columns is the expiry in recent years of key patents.
14. However, according to other third party comment, laboratory analysts require very high levels of consistency and proven reproducibility in the

---

<sup>2</sup> Human hands are one of the most universally recognised examples of chirality. When superimposed palm to palm, they resemble exact mirror images of each other. However, placing one palm on the back of the other hand, illustrates significant differences in structure and alignment.

results they obtain from chromatographic processes. Consequently there are significant evaluation and development costs that have to be incurred, even by an existing achiral column supplier, before its offering of a new model of chiral column is deemed to meet with the exacting and consistent levels of accuracy demanded by each of its potential customers.

15. In light of the above, the OFT considers that a cautious and narrow focus specifically on chiral columns is the most effective starting point for assessing this merger's effects on competition.

### **Geographic scope**

16. Cross-border sales account for a high proportion of both parties' output (in the case of Chromtech, 91 per cent). Chiral columns are small, high value (average around £2000 each), low volume units. The parties submit that many of their customers procure on a global basis using a single global price.
17. As far as assessing the impact of such cross-border sales on the geographic scope for the supply of chiral columns in the UK, the OFT considers that high levels of export sales do not amount to the same probative weight as high levels of imports.
18. Not least given that CTE's and Chromtech's combined shares of the UK supply amount to over 90 per cent, the OFT considers that the appropriate frame of reference on which to base a cautious assessment of the impact of the merger on competition is the UK.

### **HORIZONTAL ISSUES**

19. Third party comment supports the parties' submission that CTE has been producing chiral columns to different technical specifications from those produced by Chromtech – with different end uses factored into its designs.
20. Chromtech's chiral columns are used in analytical applications involving toxicological testing of chiral compounds in aqueous media. Essentially this involves subjecting fluids extracted from humans and animals to biochemical analysis using chromatographic techniques.

21. CTE's products, on the other hand, are not regularly used in such aqueous media applications. One UK distributor of chromatography products submitted that 'although present in the same market place [the parties] cannot really be considered competitors in the true sense of the word. The main competitors to Chiral Technologies through the recent introduction of similar products would be Eka Chemicals, Regis, and Macherey Nagel etc.'
22. Such comment adds weight to the parties' submission that the chiral chromatography sector is undergoing significant change in that firms previously well-established in the manufacture and supply of achiral columns have entered and are now actively contesting the market for the supply of specific types of chiral column.

### **ASSESSMENT OF HORIZONTAL ISSUES**

23. Albeit that the parties' combined shares amount to over 90 per cent, the OFT notes that the increment in CTE's share of the UK supply of chiral columns would be relatively small at six percent. Additionally, it considers that evidence from the parties and from third parties also indicates that, as a result of the relevant patents having reached maturity, the shares of supply that play out within the current market structure are now being contested in the chiral segment by new entrants such as Knauer, Eka, Macherey Nagel, Regis and Phenomenex. The OFT considers that the merger will have no impact on the entry by these foreign suppliers, which is viewed by some customers as the principal competitive dynamic going forward.
24. Furthermore, despite the estimates of very high shares of supply, any prospect of the merger leading to a substantial lessening of competition in the supply of chiral columns is, in the OFT's view, rendered unrealistic in light of evidence from the parties and from third parties pointing to significant differentiation in the parties' respective offerings and consequently a lack of reciprocal competitive constraint posed between them prior to the merger.

### **EXCEPTION TO THE DUTY TO REFER**

25. In this particular case, the OFT has also given careful consideration to the fact that Chromtech's UK turnover amounts to only £80,000 and that the

overall value of the market for the UK supply of chiral columns amounts to only £[<5] million. This is a sum substantially less than the £10 million benchmark below which a market is a candidate for being deemed of insufficient importance to justify a reference.

26. The OFT's substantive assessment of the available evidence concludes that, despite the market being highly concentrated, there has been relatively recent market entry by firms such as Sepaserve, Knauer, EKA, Macherey Nagel, Regis, Fuji Chemical, ZirChrom and Phenomenex.
27. Taking into account the unique attributes and circumstances of this case, therefore, the OFT considers that the small size of the UK market is such that the costs involved in a reference to the Competition Commission would have been disproportionate to any benefits. This would therefore have exempted the OFT from a duty to refer this particular merger.

#### **VERTICAL ISSUES**

28. No vertical issues arise as a result of this anticipated transaction.

#### **THIRD PARTY VIEWS**

29. The OFT received responses from several competitors, some of which are also UK distributors of certain of the parties' products. One competitor was concerned about the potential strengthening of CTE's existing position.
30. One customer noted that there are not many companies competing in the chiral market, but was not particularly familiar with Chromtech's products. Three other customers had no concerns on the basis that they did not consider the parties to compete closely against each other – and did not think that the merger would affect them at all.

#### **ASSESSMENT**

31. The parties overlap in the manufacture and supply of chiral columns: a specific type of equipment used in the chromatographic separation of chemical compounds.
32. Their combined shares of the supply of this product in the UK are very high at over 90 per cent (an increment of six per cent). However, evidence from

the parties and from third parties indicates that, as a result of the relevant patents having reached maturity, the shares of supply that play out within the current market structure are now being contested by new entrants such as Knauer, Eka, Macherey Nagel, Regis and Phenomenex.

33. Furthermore, despite these very high shares of supply, any prospect of the merger leading to a substantial lessening of competition in the supply of chiral columns is, in the OFT's view, unrealistic in light of evidence from the parties and from third parties pointing to significant differentiation in the parties' respective offerings and consequently a lack of reciprocal competitive constraint posed between them prior to the merger.
34. Consequently, the OFT does not believe that it is or may be the case that the merger may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom.
35. In any case, the OFT considers that, given the unique attributes and circumstances of the case, the size of market is such that the costs involved in a reference to the Competition Commission would have been disproportionate to any benefits, and this would have exempted the OFT from the duty to refer this particular merger.

## **DECISION**

36. This merger will therefore not be referred to the Competition Commission under section 33(1) of the Act.