OPINION OF MR ADVOCATE GENERAL TESAURO
delivered on 13 December 1991 *

Mr President,
Members of the Court,

1. The *Tribunal de Grande Instance*, Paris, has submitted three questions for a preliminary ruling on the interpretation of certain provisions concerning the recording of isoglucose production. Those questions were raised in proceedings between *Roquette Frères*, the only French company producing isoglucose, and the *Direction Générale des Impôts* (Directorate General for Taxation) in which the annulment is sought of the 'notice of recovery' issued by the latter requiring payment of FF 397 528 in respect of 'production levies' payable under the applicable Community agricultural provisions for quantities of isoglucose produced and not declared.

A — The production of 'enriched' isoglucose

2. The following points are relevant.

Isoglucose is a substitute for sugar obtained by the isomerization of glucose syrup which, for its part, is derived from starch. Isomerization is a process (carried out in an isomerization column) by which glucose can be converted into a solution of glucose and fructose in the ratio of 58-52% and 42-48% respectively. The isoglucose thus obtained is of virtually the same composition and sweetening power as liquid sugar (made up of equal parts of glucose and fructose).

What I have just described is the composition of *standard* isoglucose, but it is important to note that by a further process it is possible to produce 'enriched' isoglucose in which the proportion of fructose is increased and that of glucose is reduced correspondingly.

That operation comprises two stages. First, the fructose molecules are separated from the glucose molecules in *standard* isoglucose by means of chromatography. The glucose then undergoes further isomerization. Once again, isoglucose is obtained, made up of glucose and fructose in the proportions mentioned.

The cycle can of course be repeated. The isoglucose obtained from the second isomerization can be separated into fructose and

* Original language: Italian.

glucose, and the latter can be re-isomerized. And so on.

In practice, by repetition of the cycle of separation and re-isomerization of the glucose, the proportion of fructose extracted from the glucose syrup initially used is progressively increased. Thus, taking an example of an initial input of 100 tonnes of glucose, it is possible to obtain, after four successive isomerizations, 100 tonnes of isoglucose whose fructose content is no longer approximately 50% but is in excess of 90% and in which the glucose content is of course less than 10%.

3. The purpose of the process just described is to obtain a product which has a greater sweetening power than *standard* isoglucose. Fructose is the constituent which has sweetening properties. It follows that an increase in the fructose content also increases the suitability of isoglucose as a substitute for sugar.

Thus, whilst 100 tonnes of isoglucose resulting from the first isomerization have about the same sweetening power as 100 tonnes of sugar (converted into sucrose), 100 tonnes of 'enriched' isoglucose, with a fructose content exceeding 90%, have a sweetening power of about 200 tonnes of converted sugar. In other words, around 200 tonnes of sugar are required to obtain the same quantity of sweetener as that available from only 100 tonnes of glucose syrup which has undergone successive isomerization operations. This also means that 100 tonnes of 'enriched' isoglucose, with a fructose content approaching 100%, can be mixed with glucose in a ratio such that 200 tonnes of isoglucose are obtained with a fructose content of about 50%, that is to say 200 tonnes of a product having the same sweetening power as sugar.

4. Finally, it should be noted that the re-isomerization process is in fact used by the plaintiff in the main proceedings.

B — The applicable Community legislation

5. Isoglucose is, as already indicated, a direct substitute for sugar; at the same time, it is a derivative of glucose which is itself obtained from starch. It follows that, as far as its use is concerned, isoglucose is governed by the common organization of the markets in the sugar sector whereas, by virtue of its origin, it comes within the common organization of the markets in the cereals sector.

The various provisions relevant to the present case are set out in full detail in the Report for the Hearing, to which I refer. At this stage I shall merely mention several points which I consider pertinent to my reasoning concerning the rules applicable to isoglucose within the two abovementioned sectors.

(a) *The common organization of the markets in the cereals sector*

6. It need merely be pointed out that, pursuant to Article 11 of Regulation No 2727/75,[1] production refunds are available for, *inter alia*, maize and common wheat used for the manufacture of starch and for maize groats and meal used in the Community for the manufacture of glucose by direct hydrolysis (Article 11(1)(a) and (c) of Regulation No 2727/75). As is apparent from the ninth recital in the preamble to that regulation, that benefit is granted in order to enable the cereal starch, potato starch and glucose industry to obtain basic products at lower prices than those that would result from the application of the Community system (levies and common prices), thus ensuring that those products are not replaced by competing products priced more competitively.

It should also be noted that, by Regulation No 1665/77,[2] the Council abolished the production refunds previously available in respect of cereals intended for the production of isoglucose (Article 1 of Regulation No 1665/77).

The same article also states that isoglucose means the syrup obtained from glucose with a content by weight in the dry state of at least 10% fructose (and at least 1% in total of oligosaccharides and polysaccharides).

Finally, in parallel with the abolition of the production refund for the manufacture of isoglucose, the regulation provides that the Member States are to recover from manufacturers of isoglucose the amounts of the refunds granted in respect of cereals from which glucose has been obtained.

7. For the implementation of the latter provision, Commission Regulation No 1761/77[3] — as amended by Regulation No 3609/84[4] — provides that the amounts recoverable are to be arrived at by multiplying the quantity of isoglucose produced by a specified coefficient, which varies according to the type of cereal used. It is clear therefore that, in order to determine the production refund to be recovered, it is first necessary to establish how much isoglucose has been produced by the undertaking in question. However, Regulation No 1761/77 does not indicate how the calculation is to be made.

(b) *The common organization of the markets in the sugar sector*

8. As far as the provisions concerning the sugar sector are concerned, it should be remembered first of all that, as is apparent from the second recital in the preamble to the basic regulation, Regulation No 1785/81,[5] isoglucose is a direct substitute for sugar.

The two markets are also burdened with structural surpluses, a situation which

1 — Council Regulation (EEC) No 2727/75 of 29 October 1975 (OJ 1975 L 186, p. 15).

2 — Council Regulation (EEC) No 1665/77 of 20 July 1977 (OJ 1977 L 186, p. 15).

3 — Commission Regulation (EEC) No 1761/77 of 29 July 1977 (OJ 1977 L 191, p. 90).

4 — Commission Regulation (EEC) No 3609/84 of 20 December 1984 (OJ 1984 L 333, p. 38).

5 — Council Regulation (EEC) No 1785/81 of 30 June 1981 (OJ 1981 L 177, p. 4).

prompted the Community legislature to establish a quota system in order to curb production (see Article 23 et seq. of Regulation No 1785/81).[6] For the same reason, a system of 'production levies' was established in order to ensure that the producers themselves meet in full the cost of disposing of the surpluses (see the eleventh recital in the preamble to Regulation No 1785/81 and Article 28 of that regulation).[7]

9. In order to ensure the efficient and harmonious application throughout the Community of the system of production quotas and levies, the Commission gave a definition both of what was to be understood by isoglucose production and of the method by which such production was to be quantified.

To that end, Commission Regulation No 1443/82[8] provided that, pursuant to Articles 26 to 29 of the basic regulation (specifically concerning the system of production quotas and levies), isoglucose production means the total quantity of the product obtained from glucose and its polymers with a content by weight in the dry state of at least 10% fructose (see Article 2 of Regulation No 1443/82).

10. The provision just referred to was later supplemented by Regulation No 434/84[9] for the specific purpose of indicating the method to be used to establish the quantity of isoglucose produced.

Thus, pursuant to Article 2(2) of Regulation No 1443/82, as amended by Regulation No 434/84, the quantity of isoglucose produced is to be recorded by:

(a) physical metering of the *tel quel* volume of the product,

and

(b) determination of the dry matter content by refractometry

as soon as the isomerization process has terminated and before any operation to separate the glucose and fructose constituents or to produce mixtures.

C — The preliminary questions

11. In the light of the details given so far it is now possible to respond to the questions submitted by the national court.

6 — Since Roquette is the only French manufacturer of isoglucose, its quota corresponds to that allocated to (metropolitan) France.

7 — A further 'elimination levy' and a 'special elimination levy', intended to meet specific financing requirements, were introduced, respectively, by Council Regulation (EEC) No 934/86 of 24 March 1986 (OJ 1986 L 87, p. 1) and Council Regulation (EEC) No 1914/87 of 2 July 1987 (OJ 1987 L 183, p. 5).

8 — Commission Regulation No 1443/82 of 8 June 1982 (OJ 1982 L 158, p. 17).

9 — Commission Regulation (EEC) 434/84 (OJ 1982 L 51, p. 13).

(a) *The first question*

By its first question, the national court essentially seeks information from the Court as to the link between the rules applicable to sugar and those applicable to cereals as far as the method for calculating isoglucose production is concerned.

As noted earlier, in the sugar sector, and in particular for the purpose of applying the rules on quotas and production levies, calculation of the quantity of isoglucose produced is governed by Article 2 of Regulation No 1443/82, as amended by Regulation No 434/84.

The purport of the provision is clear. It requires account to be taken of all the quantities of isoglucose produced when it emerges from the isomerization column. Technically, this is carried out — as is apparent from the order for reference — by installing a meter designed to record the volume of isoglucose resulting from each isomerization, before any separation of the glucose and the fructose.

In the case of an undertaking which — like the plaintiff in the main proceedings — produces isoglucose with a high fructose content using the method described above, the rules introduced by Regulation No 434/84 require account to be taken of the quantities of isoglucose deriving from each successive isomerization of recycled glucose. It follows that the larger the number of separation and isomerization operations carried out by the manufacturer to enrich the fructose content of the isoglucose the bigger will be the quantity of isoglucose recorded and taken into account for the purposes of application of the relevant provisions governing the sugar sector.

An example will better illustrate the practical effects of Regulation No 434/84. A detailed description is given in the Report for the Hearing of the example of a manufacturer who processed, by isomerization, 100 tonnes of glucose into 100 tonnes of isoglucose, then recycled the glucose contained in the isoglucose by re-isomerization, carrying out four successive isomerization operations.

At the end of the process (one isomerization plus four re-isomerizations of recycled glucose) the output will be *100 tonnes* of isoglucose with a high fructose content: during each re-isomerization part of the glucose will have been converted into fructose. However, from the accounting point of view, a total of *187.5 tonnes* of isoglucose will have been recorded. The reason for this is that, although the product is recycled, every passage through the isomerization column results in the production of isoglucose which is duly recorded on emerging from the column.

12. It will also be observed — even though Roquette did not specifically argue the point — that that method of recording isoglucose production, provided for in Regulation No 434/84 proved necessary in order to prevent the fundamental objectives of the Community legislation in the sugar sector from being undermined.

In the basic regulation (No 1785/81) attention is drawn to the fact that isoglucose is a direct substitute for sugar and therefore that the markets in those two products are closely linked. The same regulation also makes it clear that there are structural surpluses in the Community market in sweeteners and therefore that the decisions adopted in relation to one of those products necessarily have repercussions for the other. As a result, isoglucose and sugar must, in principle, be subject to a common regime.

It seems to me to follow that one of the purposes of the rules in question is to guarantee a balance between the two markets, avoiding distortions of competition between isoglucose and sugar.

As already stated, it is that purpose which prompted recourse to the method of recording isoglucose production provided for in Regulation No 434/84.

That regulation takes account of the fact that the re-isomerization of glucose is designed to increase the fructose content of the isoglucose obtained; that process thus gives rise to an increase in the sweetening power of the isoglucose, enhancing its substitutability for sugar. As already pointed out, 100 tonnes of isoglucose with a fructose content approaching 100% have a sweetening power equivalent to that of about 200 tonnes of converted sugar whereas 100 tonnes of non-enriched isoglucose with a fructose content of around 50% have a sweetening power equivalent to about 100 tonnes of converted sugar.

It follows that the calculation method provided for in Regulation No 434/84 takes account of the fact that for every re-isomerization of glucose there is a corresponding increase in the overall fructose content of the isoglucose and therefore of the quantity of sugar which it can replace.

Therefore, that method, by taking account of all the quantities of isoglucose deriving from each successive re-isomerization, ensures that the 'enriched' isoglucose is not brought into account, in particular for application of the quota and production levy rules, in the same way as standard isoglucose, the fructose content of which is about the same as that of sugar. From that viewpoint, therefore, Regulation No 434/84 appears entirely consistent with the objective of ensuring both the correct application of the measures directed towards containment of supply introduced by the Community legislature and balance between the two related markets in sugar and isoglucose.

13. The position is, however, very different in the cereals sector, where other rules apply regarding the recordal of isoglucose production. For the purpose of recovering production refunds, the different fructose content of the isoglucose, and therefore its greater or lesser sweetening power, is entirely irrelevant. In order to calculate the sums to be recovered, all that is necessary is to establish the quantity of cereals converted

into starch and subsequently into glucose and isoglucose. That quantity is calculated by applying a particular coefficient to the quantity of end product (the isoglucose) obtained from the basic cereal.

For that purpose only the quantity of isoglucose obtained from the first isomerization need be taken into account.

It is that figure which indicates both the quantity of isoglucose used and, therefore, the quantity of cereals from which the glucose itself came.

If, on the other hand, account were also taken of the quantities of isoglucose deriving from the subsequent recycling of glucose, the quantity of cereals used would be artificially 'inflated'. The recycling in fact only modifies the *composition* — more particularly, the fructose content — of the isoglucose produced; but it is obvious that, on the other hand, regardless of the number of recycling operations carried out, the quantity of intermediate product (glucose) and of basic product (cereals) used remains exactly the same.

It follows that, for the purpose of applying Regulation No 1761/77, as amended by Regulation No 3609/84, account must be taken only of the isoglucose production resulting from the first isomerization. In practice, this means that the quantities of isoglucose obtained from re-isomerization of recycled glucose must be deducted from the total quantity calculated in accordance with Regulation No 434/84.

(b) *The second question*

By its second question, the national court wishes essentially to be informed whether, in the case of successive re-isomerizations not of pure glucose but of glucose syrup containing little more than 10% fructose, the quantities of isoglucose obtained from each isomerization must be brought into account pursuant to Regulation No 1443/82, as amended by Regulation No 434/84.

A preliminary observation is called for before that question is answered. The plaintiff in the main proceedings, apprised of the fact that the French tax administration, giving effect to the regulation just referred to, intended to bring into account the quantities of isoglucose resulting from each re-isomerization, modified its production process. It no longer fed pure glucose (separated by chromatography) into the isomerization column but used a solution of isoglucose with a very low fructose content (about 11%).

According to Roquette, a product of that kind is not covered by the rules laid down in Regulation No 434/84. The latter, in its view, relates only to isoglucose obtained from *glucose or its polymers*, not from other isoglucose.

I must say straight away that I find that interpretation unacceptable, in so far as it derives from a formalistic reading of the provisions and takes no account of the aim pursued by the calculation method introduced by the regulation in question.

Suffice it to observe, in that connection, as properly emphasized by the Commission, that the purpose of Regulation No 434/84 is precisely to bring into account all isoglucose obtained from a recycling process intended to increase the fructose content of the isoglucose in question. And that process is used both when the recycled product is pure glucose and when the recycled product is a solution of isoglucose with a high glucose content. In both cases the process used is the same, as is the resultant product. In both instances, through isomerization, the glucose (either pure or mixed in part with fructose) is converted into isoglucose.

Furthermore, the very proportions of the isoglucose solution used for re-isomerization give the impression that the method used by the company is nothing more nor less that a clever contrivance designed to evade the strict application of the rules on the recording of isoglucose production in the sugar sector.

I consider therefore that the calculation method provided for in Regulation No 1443/82, as amended by Regulation No 434/84, should also be applied where a manufacturer produces isoglucose with a high fructose content by successively re-isomerizing not pure glucose but isoglucose with a fructose content exceeding 10%. It follows that the isoglucose deriving from each re-isomerization operation must be brought into account as a quantity to be set against the manufacturer's quota under the system established by Regulation No 1785/81.

(c) The third question

By its third question, the national court essentially asks the Court of Justice to determine whether isoglucose used as an intermediate product for the manufacture of other products is also to be counted against quota under Regulation No 1785/81.

In that regard it need merely be stated that isoglucose is a direct substitute for sugar, as both an end product and an intermediate product, and that, precisely because of that extensive substitutability, the Community rules provided that, in principle, all quantities of sugar or isoglucose produced should be counted against quota irrespective of the *intended purpose* of the product.

As the Commission correctly observed, that is confirmed *a contrario* by Article 31 of Regulation No 1785/81, which empowers the Council to decide that sugar or isoglucose intended for the manufacture of certain products may be excluded from

relevant production for the purpose of applying the quota system.

Finally, it should also be observed that the Court, in its judgment in Case C-18/89 *Maïzena* [1990] ECR I-2587, recognized that a departure from the equal treatment of isoglucose and sugar in cases where they are intermediate products necessarily results in distortion of competition in view of the fact that they are interchangeable even as intermediate products.

In view of the foregoing considerations, I am of the opinion that isoglucose used as an intermediate product for the manufacture of other products must be subject to the quota system established by Regulation No 1785/81.

D — Conclusion

In conclusion, I therefore suggest that the Court give the following replies to the national court:

1. For the purposes of calculation of the production refunds to be recovered from isoglucose manufacturers pursuant to Commission Regulation No 1761/77, as amended by Regulation No 3609/84, isoglucose production is to be determined by deducting from the total quantity calculated in accordance with the method provided for by Regulation No 1443/82, as amended by Regulation No 434/84, the quantities of isoglucose deriving from the re-isomerization of recycled glucose.

2. The quantities of isoglucose obtained from the re-isomerization of a glucose syrup with a fructose content of at least 10% must be brought into account in accordance with Commission Regulation No 1443/82, as amended by Regulation No 434/84, and must, consequently, be set against the quotas provided for by Council Regulation No 1785/81.

3. Isoglucose used as an intermediate product for the manufacture of other products is subject to the quota system provided for in Council Regulation No 1785/81.