DIOXIN FREE® QUALITY MARK: WHY NOT?

Vladimiro Bonamin, Stefano Raccanelli*

SGS Ecologia Srl, Via Campodoro 25, 35010 - Villafranca (PD), Italy

^{*} Consorzio Interuniversitario Nazionale la Chimica per l'Ambiente, V. della Libertà 5/12, 30175 Marghera (VE), Italy

Introduction

At the present time it is often necessary to obtain a certification for the guarantee of quality, or a quality mark, in every production, commercial or service activity. In the last years, certificator organisms were instituted for the verification and the declaration of new systems, which are subjected to a large series of rules, for example the ordinary ISO 9000 and ISO 14000, the specialised EN 45001 for laboratories and QS 9000 for the automotive sector, and the more recent SA 8000 which certificate the respect of the social rules. In addition, the product certification marks are to be mentioned, for example the appellation "DOC" (AOC) for wines and several other denominations of origin for typical products.

For our market sector, where consumers are showing themselves more and more prudent in purchasing, we therefore propose the mark DIOXIN FREE [®], instead of the more generic CHLORINE FREE, for the guarantee of a product and of the environment respect in its production route.

In the following, a concise summary of our proposal will be given.

Proposal

Usually, a product certification scheme attests that neither the product itself, nor its manufacture cycle and ground ingredients, are exceeding or did exceed the dioxin predeclared content limits, and that these limits should be less at least X times than the official ones (if there are ones). This scheme is managed by an independent certification organism accredited for the product and system certification in conformity with EN 45011, EN 45012 (or equivalent if outside Europe) respectively; the laboratory engaged for all determinations and measurements which are needed for the certification must be accredited in conformity with EN 45001 (or equivalent if outside Europe); the control organism for the verification of production parameters and products' sampling must be accredited in conformity with EN 45004.

The Normalization Body arranges a certification scheme, in which the demonstration and verification criteria are defined, and to which the applicant shall refer. The activity of a production certification organism, which delivers the certification DIOXIN FREE [®], is controlled by a certification committee which includes, for example, the delegates of the Ministries of Health and Environment, the Environmental Agencies, the National Research Institutes, the consumers', producers' and traders' Associations, and the technical people who are responsible of all involved control, certification and test organisms.

The producer, who is applying for a certification, sends in to the product certification organism the technical specifications in accordance with the above scheme; he describes here the physical-chemical characteristics and manufacture of the product, inclusive of the processes regarding its

ORGANOHALOGEN COMPOUNDS 445 Vol. 44 (1999) ingredients/components and accessories (for example packing), in order to demonstrate and quantify the upper dioxin limits due to the production process.

The mark will be conceded after the owner technical specification approval (manufacture's dossier) and after the positive verification of the product threshold limits by the laboratory, its conformity in the field of the technical specification, and the documental and physical check of the ingredients/components' and accessories' conformity.

The mark preservation is ensured if repeated periodic product analysis and verifications *in situ* give positive results, and if every change of ingredients/components and of the manufacture's cycle is approved.

Periodic sampling can be executed also directly on selling points: the sampling frequency depends on product typology, production volumes, and on the presence of suitable management systems for the quality and the production statistic control.

Discussion

At this point, it seems clear that there is a way to obtain a dioxin free certification. This certification could allow all final consumers to choose a product which not only contain dioxin at a non-toxic concentration, but also was manufactured in such a way that no environmental dioxin contamination occurred. Because of this consumers' choice, the producer is forced to adopt the mark, and consequently allows the health and environment protection (and at the same time the expansion of his business).

From a series of papers, dioxin is a well known ubiquitary and persistent polluting agent, both in food and in other articles of wide consumption. These papers allowed, as a consequence, the introduction of more severe regulations, but unfortunately they could not allow the consumers to consider and choose dioxin-free products.

Our proposal for a dioxin-free mark could appear provocative; however, the quality marks brought forth the commercial success of famous products and at the same time they protected these products year after year and guaranteed the consumers. Furthermore, the introduction of a certification could stimulate producers and researchers to pursue tangible and important results in the field of the progressive reduction of a phenomen, and not only in the simple knowledge of it.

Research is always costly, but if it is stimulated by this goal, it could go on economically independent.

Could you imagine a dioxin-free butter or milk? Maybe it is more difficult to imagine a dioxin-free service, for example a MSW incineration, just think about it.

If anyone thinks that our proposal is well-grounded or interesting, please do not hesitate to contact us, and cooperate with us or make counterproposals. The results of many laboratories could be revalued by bringing them out of the congress halls.

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