

THE FEDERATION CFTC-CMTE POSITION ON THE KEY CHALLENGES OF A RENEWAL EXEMPTION FOR CRYSTAL IN ELECTRIC /ELECTRONIC EQUIPMENT

The Directive on Restriction of Hazardous Substances notably restricts the use of lead (Pb) in the manufacture of various types of electronic and electrical equipment (EEE), including lighting equipment, with a view to reduce their discard to the environment.

An exemption for “Pb bound in crystal as defined by Directive 69/493/EEC” was granted in 2008 (exemption 29), for applications such as lamps, electric chandeliers and luminaires, horology, furniture etc. The exemption applied for five years and a renewal request was lodged in January 2015.

By definition, crystal is a substance stemming from the synthesis of a number of raw materials, including lead oxide. It is notably used for specific qualities:

For consumers	For crystal manufacturers
<ul style="list-style-type: none"> - Better optical properties - Energy savings - Beauty of the artefacts : Chandeliers, floor lamps, candelabras, table lamps, wall sconces, luminaires, clocks etc. <p>The refraction index of crystal items generates a light transmission bigger than the one generated by flint glass (by a factor of at least 10%) i.e. the “rainbow effect”</p>	<ul style="list-style-type: none"> - Lower melting point of crystal allows for <ul style="list-style-type: none"> • A longer handcraft working time on the material, enabling forms which could otherwise not be possible to produce

- For the federation CFTC CMTE ,should the renewal not be granted, the existence of crystal manufacturers would be endangered :
 - Chandeliers, floor and table lamps, luminaires and candelabras represent 1/3 of their turnover ;
 - Some of the manufacturers already weakened by the economic crisis would disappear in the short and medium term;
 - In France, all manufacturers have been granted a State label « Entreprises du Patrimoine Vivant” (Living Heritage Companies) put in place to reward French firms for the excellence of their traditional manufacturing skills ;
 - Such traditional and manual skills are considered as « métiers d’art » (arts & crafts professions).

- The region of Lorraine (eastern France) would be affected at its very heart :
 - Around 1 600 direct jobs in France, 6 000 in Europe and so many indirect jobs
 - Branding and identity of a Region already deeply affected by a long term crisis ;
 - Crystal manufacturers are located outside the major employment sites; they really are the unique economic lungs of their economic activity zones.
 - Crystal manufacturers have become a tourist attraction for Lorraine (ex.: 20 000 visitors for Le Musée La Grande Place in Saint-Louis).

- For the Federation CFTC CMTE, banning the use of Lead would have no environmental impact in this case:
 - Instead, it would jeopardize a whole sector for a limited risk. Most of the **items manufactured in our factories and workshops are unique**. Each of them is a creation or issued in a limited edition. There is **no mass production** :
 - for horology, production is about hundreds per year per producer,
 - for electric chandeliers, total production volume is a little more than a thousand per year in Europe.

- Landfilling of those prestigious items is highly unlikely: they are **kept, transferred, inherited or resold**. Crystal manufacturers provide inherent assistance via an after-sales service by which they collect and replace the broken parts of crystal parts of electric luminaires. In addition, there are second-hand shops and specialized repair workshops, privately collecting, repairing and replacing spare parts of crystal glass electric applications.
- A comparison needs to be done between the few thousands of crystal items and for instance the 5,8 millions of TV screens produced in 2014 in Europe, also produced with Lead.
- The applicants have produced the results of leaching tests¹. Those tests demonstrate that crystal is classified as non-hazardous waste according to criteria from Council Decision 2003/33/EC, including in relation to Pb leaching.
- Should the renewal not be granted, there would be no positive effect on the consumer (which is not exposed) or the environment (compliance with non-hazardous waste criteria).
- No substitution scientifically nor technically practicable
- Thorough and documented research over two decades **did not lead yet to a substitute to Pb oxide** which remains an essential constituent to crystal, as recognized by Directive 69/493/EEC. Moreover, the industrial use of Pb oxide is heavily regulated at EU level with regard to environment and human health.

The Federation CFTC CMTE Exemption Request For Exemption 29 (Lead bound in crystal glass) is based on the following arguments :

- ⇒ No acceptable substitute that would give to the items the same optical properties, aesthetic qualities and allow energy savings
- ⇒ Lead oxide is synthetized into the substance crystal
- ⇒ Crystal brings the capacity to create items otherwise impossible to produce
- ⇒ Crystal elements of electric equipment are precious, preserved, and restored, not discarded
- ⇒ No danger to the environment : compliance with non-hazardous waste criteria for the environment
- ⇒ Crystal is exempted from REACH restrictions on Pb containing articles
- ⇒ No substitution scientifically nor technically practicable cf. over 20 years of research so far
- ⇒ Strictly controlled manufacturing conditions,
- ⇒ No danger to the consumer,
- ⇒ Crystal manufacturers already under economic stress, sometimes with a negative growth for several years, and a ban on articles representing 20% to 40% of the turnover could be fatal
- ⇒ Constellation of mainly SMEs assembling and supplying crystal items
- ⇒ Preservation of economic and cultural heritage.

¹ Cf Test reports performed by the SSV n°126917 and 126760, April 2015.