

28 March 2008

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**Ref: RoHS Directive**

Dear Madam,

EuPC is the professional representative body of plastics converters within Europe whose activity embraces all sectors of the plastics converting industry including recycling. The overall objective is to defend and promote the interest of the European plastics converting industry.

ETHIC's overall objective is to defend and promote the interests of the European thermoplastic independent compounders and masterbatches through the following activities.

I am writing to you on behalf of EuPC (European Plastic Converters - [www.plasticsconverters.eu](http://www.plasticsconverters.eu)) and its subgroup ETHIC (European Thermoplastic Independent Compounders- [www.compounders.eu](http://www.compounders.eu)) in the context of the ongoing Öko Institute consultation regarding the substances to be potentially added to the RoHS Directive.

The flame retardant Tetrabromobisphenol-A (TBBPA), which is for the moment included in your draft high priority list, does not meet any of the criteria outlined in the Commission tender. In fact, TBBPA is nor a PBT, CMR or a vBvP, neither an endocrine disruptor.

We are adamant that TBBPA should not be added to the revision of the RoHS Directive as the EU has just finalised an 8-year Risk Assessment to evaluate its effects on human health and the environment. Subsequently the Risk Reduction Strategy did not foresee any legislative restriction. TBBPA is therefore approved for use by the EU for all its applications and it will subsequently go through REACH registration. The results of the Risk Assessment were confirmed by the SCHER Committee of the European Commission.

TBBPA is used as a reactive component in the production of printed circuits boards (mainly of FR4 laminates) and, being integrated into the polymer of the board, it does no longer exists as such.

For the additive use of TBBPA in E&E plastics casings, a low environmental risk was identified in one production plant in Europe only. After reviewing all possible EU legislative measures, including the RoHS Directive, the rapporteur and the Commission recommended IPPC as the most effective and proportionate measure to address the risk identified.

In addition, the flame retardant Deca-BDE<sup>1</sup> in electrical equipments benefits from an exemption from the RoHS Directive since 15 October 2005<sup>2</sup>. In the framework of the upcoming review of the RoHS Directive, the European Commission, with the support of Öko-Institut and Fraunhofer Institut, has recently launched a consultation asking stakeholders for information to justify the current exemptions included in the Annex of the RoHS Directive<sup>3</sup>. The Commission has therefore included Deca-BDE exemption in polymeric applications in this consultation.

At a time when the demands on the electrical & electronic industry to respect the needs of the environment and of fire safety have never been higher, it is important that any chemical substances used in those applications are thoroughly tested. Deca-BDE has a long history of continued safe use and was thoroughly assessed by the European regulators. On 26 May 2004, the European Union Competent Authorities closed the 10 year scientific assessment of commercial Deca-BDE concluding no significant risk for the environment or human health and therefore no additional risk reduction measures were necessary. Recently the UK finalized the periodic review of Deca-BDE and evaluated new science published since and concluded that the decision taken in 2004 is valid as of today. This was confirmed by the EU Competent Authorities meeting in December 2007.

Furthermore, the inclusion of antimony trioxide<sup>4</sup> and antimony compounds in general to the list of high priority hazardous substances is to be considered in the EU RoHS Directive.

Antimony trioxide has only recently been subject to an EU Risk Assessment. The conclusions from the final draft of the risk assessment report clearly indicate that it does not meet the criteria for high priority substances. Antimony compounds will be subject to further scrutiny under REACH, but as of now many antimony compounds are not even classified as hazardous.

In addition, the Öko Institute has included in the draft high priority list a number of other BFRs whose use in E&E equipment or in other consumer products is "intensively discussed". We question this criterion as it is discriminatory and not based on science. Some of the BFRs listed are not even used in E&E equipment (some are wood preservatives and some are used in foams). This wide list of brominated flame retardants is targeted without specifying whether they meet the criteria set out by the Commission for a priority substance. We currently request this list of BFRs to be removed completely from your priority list.

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<sup>1</sup> Please refer to the letter sent by Chemtura Manufacturing UK Ltd

<sup>2</sup> [http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/oj/2005/l\\_271/l\\_27120051015en00480050.pdf](http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/oj/2005/l_271/l_27120051015en00480050.pdf)

<sup>3</sup> more general information on the consultation can be found on this website:

<http://rohs.exemptions.oeko.info/index.php?id=61>

<sup>4</sup> Please refer to the letter sent by the International Antimony Association

## **PVC MENTIONED AS HAZARDOUS SUBSTANCE<sup>5</sup>**

The list includes PVC under item 21. The column “hazard” states “Dependent on the additives (stabilisers and plasticisers) used; Dioxin formation during incineration; Source of organic bound chlorine”.

We strongly object to the blanket inclusion of PVC in this inventory of hazardous substances, for the following reasons:

### **REGULATORY AND DEFINITIONS**

PVC together with its additives is not a substance, but a material, or a preparation as defined in REACH. Hence PVC should not at all be mentioned in this list of substances. Otherwise all other materials should be mentioned as well.

Commission Decision 2001/118/EC “amending Decision 2000/532/EC as regards the list of wastes” does not mention PVC. This Decision mentions plastics waste under several entries which could be relevant for E&E waste, namely:

- 160119 (plastic waste not otherwise specified),
- 191204 (plastics and rubber waste from mechanical treatment of waste),
- 200139 (plastics from municipal wastes including separately collected fractions)

All these entries qualify such plastic waste as non-hazardous.

#### **There is therefore no legal or scientific basis for**

- **Treating PVC waste differently from plastic waste in general,**
- **Qualifying any plastic waste from E&E applications as hazardous.**

Likewise, the “Basel Convention on the Control of the Transboundary Movements of Hazardous Wastes and Their Disposal” does not consider PVC waste as hazardous. In 1997, at the twelfth session of the Technical Working Group of the Basel Convention, it was recognised that plastic wastes - including those of chlorinated polymers and copolymers - do not have *intrinsic* hazard characteristics. As far as we are aware, no country has informed the Basel Secretariat that PVC waste has been included in its national definitions of hazardous wastes.

### **TECHNICAL – DIOXIN FORMATION DURING INCINERATION**

Dioxin can and will be produced during any incineration process, because there is always enough halogens present in the waste to reach the plateau above which increased halogen concentration does not significantly affect dioxin production.

The European Union Commission published in July 2000 a Green Paper on the Environmental Issues of PVC. The Commission states that: *“It has been suggested that the reduction of the chlorine content in the waste can contribute to the reduction of dioxin formation, even though the actual mechanism is not fully understood. The influence on the reduction is also expected to be a second or third order relationship. It is most likely that the main incineration parameters, such as the temperature and the oxygen concentration, have a major influence on*

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<sup>5</sup> Please refer to the letter sent by ECVM

*the dioxin formation*". The Green Paper states further that "**at the current levels of chlorine in municipal waste, there does not seem to be a direct quantitative relationship between chlorine content and dioxin formation**".

These views are based on more than ten in-depth studies carried out in various parts of the world. Moreover, the EU Waste Incineration Directive sets a stringent emission limit of 0.1 ng I-TEQ/m<sup>3</sup>, which is met by properly designed and operated incinerators, irrespective of the type of waste they treat.

### **PVC MENTIONED AS APPLICATIONS FOR OTHER NAMED SUBSTANCES**

In Entry 7 (Bisphenol A), the column "Main use in EEE" states "Polycarbonate plastic in electronic devices, medical equipment; in PVC as hardener, catalyst, binding agents, stabiliser; epoxy resin production". **This information is not entirely correct, or wrongly formulated.** Bisphenol A is only used in the preparation of additive packages for PVC processing, and as an anti-oxidant in the production of plasticisers for use in PVC processing. Since the voluntary discontinuation of use as inhibitor in PVC (polymer) production, the remaining uses are considered adequately controlled by the risk management measures in place. See EU Risk Assessment dated 2003.

In Entry 22 (PCBs), the column "Main use in EEE" states "Flame retardant in PVC plastic cable; capacitors". **This information is completely out of date.** PCBs use in PVC was discontinued at least 30 years ago.

In Entry 28 (Short-chained chlorinated paraffins (SCCP) (Alkanes, C10-13, chloro), the column "Main use in EEE" states "plasticisers in PVC (cable) flame retardant plasticisers". **This information is also out of date.** SCCP are no longer used in PVC.

For the reasons detailed above, we request you to delete entry 21, correct entry 7 and delete PVC from the "main uses" of entries 22 and 28.

Yours sincerely,

Paolo Bochicchio  
European Government Affairs Director  
EuPC

## **ANNEX**

### **Detailed arguments supporting the continued exemption of Deca-BDE in polymeric applications**

#### **1. The EU risk assessment under the Existing Substances Regulation 793/93 of Deca-BDE has concluded that there is no significant environmental, health or consumer safety risk**

- On 26 May 2004, the European Union Competent Authorities closed, after 10 years of research, the scientific assessment of commercial Deca-BDE concluding no significant risk for the environment or human health and therefore no additional risk reduction measures were necessary beyond those already being applied.

#### **2. Deca-BDE is the flame retardant with most scientific data available**

- The EU risk assessment of Deca-BDE, which has been regularly updated since 2004 by the UK Rapporteur to take into account new science, has looked into over 1100 studies on Deca-BDE. The new environmental and human health data support the conclusions of the EU risk assessment adopted in 2004.

#### **3. Deca-BDE's EU risk assessment recent review was concluded with no need for any restrictions for Deca-BDE's use**

- Meeting in Lisbon on 11 December 2007, the Competent Authorities responsible for the EU's existing chemicals policy confirmed the updated Risk Assessment Report conclusions of no significant risk and no need for restrictions, agreed that the Commission should proceed to formal publication of the Risk Assessment Report by June 2008.

#### **4. Industry is working with EU Authorities to regularly monitor Deca-BDE levels in the environment and works since 2005 on controlling industrial emissions in Europe**

- In 2004, industry committed with the relevant EU authorities, to initiate a 10 year independent biomonitoring and environmental programs. Results of these programs are published and regularly reviewed by the EU Authorities.
- A voluntary programme (VECAP<sup>TM6</sup>) was initiated in 2005 to control and reduce industrial emissions in partnership with Deca-BDE user industries in Europe. In 2007, 82% of Deca-BDE used in the EU plastics industry is covered by VECAP<sup>TM</sup>. Emissions to the environment and water have been reduced<sup>7</sup>. The program is set for 10 years and will provide the first time a clear data on Deca-BDE in the environment. This program is already following the REACH principles which request to engage downstream users in emissions control.

<sup>6</sup> Voluntary Emissions Control Action Program. See further information at <http://www.vecap.info>

<sup>7</sup> See 2nd VECAP annual progress report at [http://www.bsef.com/newsmanager/uploads/vecap\\_2007\\_annual\\_progress\\_report.pdf](http://www.bsef.com/newsmanager/uploads/vecap_2007_annual_progress_report.pdf)

**5. Deca-BDE has a positive impact on consumer safety as it enables a wide variety of materials to meet a high fire safety standards**

- Deca-BDE makes a tremendous contribution to society in terms of fire safety. Using Deca-BDE in the manufacture of electronic equipment prevents deaths and injuries from fires by reducing the chances of materials igniting and lowering the rate of combustion. Flame retardants are not only important in the home, but also ensure the fire safety of many public places, automotive, aviation and others.

**6. Alternatives to Deca-BDE do not have the same level of scientific data regarding their health and environmental impact**

- Alternatives to commercial Deca-BDE exist. However none of the alternatives has gone through a risk assessment as extensive as that for Deca-BDE.
- To be considered suitable alternatives to Deca-BDE according to the criteria of Article 5.1.b, substitute chemicals should be subjected to the same or similar scientific review process and to be able to demonstrate that their impact on the environment and health is lower than Deca-BDE.
- Deca-BDE is a substance with no significant risk identified and is now far better controlled through the manufacturing supply chain than any alternatives owing to its monitoring and emission reduction programs.

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