



## IAOIA Mission

*The Mission of the International Antimony Oxide Industry Association is to serve the common interests of antimony producers, users and other stake holders world-wide concerning the environmental, health and safety regulatory affairs concerning antimony substances and their uses. The activities of the IAOIA will be determined by its members, and may include the conducting studies, dissemination of information pertaining to the safety and benefits of antimony substances, and the development of scientific information for the submission to governmental agencies.*

## EU Labeling Procedure

The IAOIA member companies have agreed on a harmonized EU Labeling procedure. With regard to human health, antimony trioxide will be labeled:

Xn: Harmful, Carc. Class 3, R40 (limited evidence of a carcinogenic effect).

Labeling is not required for encapsulated or bound preparations (e.g. polymers/elastomers/extruded form) because the exposure path and therefore the risk is eliminated. According to Article 10 or Annex V.B.9. (EU Dangerous Substance Directive, 67/548/EEC, Annex VI, 9.3.) such preparations do not require the same label as they "do not present a danger to human health by inhalation, ingestion or contact with the skin or to the aquatic environment in the form in which they are placed on the market. However, all the information which would have appeared on the label shall be transmitted to the professional user by means of an information system in a format foreseen in Article 14 of the abovementioned Directive", that is a MSDS.

Concerning the environmental labeling requirements, antimony trioxide does not require any classification & labeling. Solubility (1.86 mg/l) is lower than the ecotoxicity (>2.4 mg/l, algae), therefore no acute ecotox classification (R50-52) is required. A 28-day chronic transformation/dissolution test gave 0.118 mg/l Antimony trioxide solubility, which is lower than chronic toxicity for algae, fish & daphnia. It can therefore be concluded that there is no need for chronic classification (R53). This interpretation was agreed to in the EU Risk Assessment process.

## Meetings news:

April 1-3, 2003 Addplast, Köln  
April 11, 2003 IAOIA meeting, San Francisco, CA.  
March 5-6, 2003 "Flame retardants for electrical applications", Brussels  
March 9-12, 2003 FRCA, New Orleans, LA.

## Polyester 2002 Zurich Meeting

Members of the IAOIA attended the Polyester 2002 meeting. Karl Coopmans of Campine presented an update on IAOIA activities and legislation concerning Antimony Oxide ( $Sb_2O_3$ ). We emphasized the R40 label indicates "limited evidence of Carcinogenic effect" because evidence of human health effects is inconclusive.  $Sb_2O_3$  is not genotoxic and it has been demonstrated not harmful to the environment largely because of the low water solubility.

The US FDA, German BgVV and French legislation on food approval all list approval for  $Sb_2O_3$  as a PET catalyst. EU directive 90/128/EC amended recently the Specific Migration Limit (SML) to 0.02 mg/kg as of 1/1/04. This SML was derived from a previous World Health Organization (WHO) TDI of 0.86  $\mu\text{g}/\text{kg}/\text{day}$ . The current TDI is 6  $\mu\text{g}/\text{kg}/\text{day}$ .

## USA labeling requirements

The labeling requirements for the USA have not changed however, a new regulation requires that ocean carriers and freight forwarders provide US Customs notice of the contents of a U.S. bound ocean container 24 hours before the container is loaded onto a vessel in a foreign port. The regulation was effective December 2, 2002. Strict enforcement is expected after January 30, 2003. This will require that all packages and bills of lading are properly marked.

Consumers of antimony oxide should be aware of the labeling requirements for packaging.

The United States Department of Transportation requirements for labeling are based on the composition of the material. Unlike the EU regulations, labeling is required regardless of the form of the product. That is regardless of whether it is a powder or an encapsulated form.

The following is a brief summary of the USA labeling requirements for antimony oxide. Please consult 49CFR 172.102 Special Provision 35 for further details prior to using information.

- A single package containing less than 1,000 lbs. of antimony oxide and less than 1 lb. of arsenic trioxide is not regulated.
- A single package containing less than 1,000 lbs. of antimony oxide and more than 1 lb. of arsenic trioxide is regulated with the following shipping description:

**RQ Environmentally Hazardous Substance, Solid, N.O.S. (Arsenic Trioxide), 9, UN3077, PGIII**

- A single package containing more than 1,000 lbs. of antimony oxide and less than 1 lb. of arsenic is regulated with the following shipping description:

**RQ Environmentally Hazardous Substance, Solid, N.O.S. (Antimony Trioxide), 9, UN3077, PGIII**

- A single package containing more than 1,000 lbs. of antimony oxide and more than 1 lb. of arsenic is regulated with the following shipping description:

**RQ Environmentally Hazardous Substance, Solid, N.O.S. (Antimony Trioxide, Arsenic Trioxide), 9, UN3077, PGIII**

The proper shipping name and UN ID Number 3077 are required to be marked on each package that contains the RQ weight.

In addition to the labeling requirements, the packages and the truck must be placarded with a Class 9, 3077 placard.



A label is placed on the package to represent the hazard class. A Hazard Class Label is about 4" by 4" on point.

If a bulk bag is used, the UN ID Number 3077 will be entered across a Hazard Class 9 Placard which is about 12" X 12" on point. A placard is just a big label in a sense, but the terms are important.

UN Certified bags are marked with a UN Performance marking. This marking is a circle around the letter U and N. Bulk packages that are regulated are required to be UN certified for the weight contained. UN certification can be easily verified because the UN performance marking is required to be stenciled prominently on the bag.

## The IAIOA Members

Visit our website: [www.iaioa.org](http://www.iaioa.org)

### *In the USA / Europe organization Members:*

Campine  
Great Lakes Chemical Company  
Laurel Industries, Inc. (OxyChem)  
Produits Chimiques de Lucette  
Sica  
Penarroya Oxide Group

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Dead Sea Bromine Group (DSBG)  
Helm AG  
Durr Marketing Associates, Inc.  
Umicore Precious Metals  
Goldmann GmbH & Co

### *In the Japan Mining Industry Association Members:*

Nihon Seiko Co., Ltd.  
Mikuni Smelting & Refining Co.  
Nissan Chemical Industry, Ltd.  
Sumitomo Metal Mining Co., Ltd.  
Tohko Industrial Corp.

### *In JMIA Associate Members*

Susuhiro Chemical Co, Ltd  
Dai-ichi F R Co, Ltd

*These are the responsible companies that are working very hard to ensure the antimony products are protected in the market place through proper response to all our government agencies and development and distribution of reliable data. These organization are sharing the costs, both financial and through employee time. By choosing to conduct your business with one of these companies you are supporting our industry.*

*If you are a producer, distributor or consumer of antimony products and would like to contribute to these efforts, contact an IAIOA, JMIA office or one of our member companies.*

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JMIA, Japan Mining Industry Association, Antimony Committee Chairman, Osamu Iwayama 03(3235)0031