International ANTIMONY Association

FACTSHEET

ANTIMONY

May 2011

Summary profile

Antimony is a metal which occurs naturally in the earth's crust. The product is sold commercially in the form of grey, odourless pieces of metal in massive form and occasionally in powder form. Most of the antimony mined today comes from China, which supplies over three-quarters of the world's total. In 2010 the total global volume of antimony production was ~135.000 tons.

CAS-No. 7440-36-0 EINECS No. 231-146-5

Applications

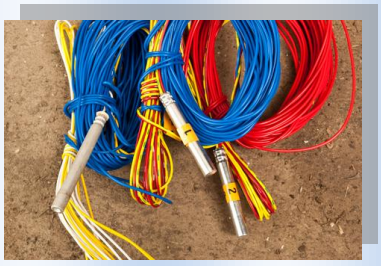
Antimony trioxide

Antimony metal massive is used in:

- ✓ **the production of diantimony trioxide (ATO)** which is used in a wide variety of industrial applications, principally as a "synergist" with flame retardant chemicals and as a catalyst in the manufacture of polyester (PET)
- ✓ **the production of alloys :** Antimony melts at 600° C. This highly crystalline metalloid gives metal its hardness and a much better and sharper cast. Crystalline in appearance it is both brittle and fusible. When alloyed with lead, it strengthens the alloy and improves casting parameters.

Other uses:

- semiconductors and recordable media
- preparations (welding and soldering products, flux products)
- articles (for example, vehicles, machinery, mechanical appliances, electrical and electronic articles, electrical batteries and accumulators)



Antimony metal powder is used in:

- detonators in mining facilities

International Antimony Association VZW – Av. De Broqueville 12 – 1150 Brussels – Belgium
Tel: +32 (0) 2 762 30 93 Fax: +32 (0) 2 762 82 29 www.antimony.be VAT: BE 0894.536.176

Scientific aspects and regulatory status

Antimony is not legally classified as laid down in Annex I of Directive 67/548/EC, or the CLP, EU Regulation 1272/2008. Instead a self-classification has been proposed for the antimony metal powder based on its impurities and on the read across*. The massive form (non-respirable fraction), remains without classification and labelling.

A read-across has been performed from diantimony trioxide to antimony. ATO has been extensively tested for compatibility with human health and the environment in the EU Risk Assessment Report (RAR) on Diantimony Trioxide.

No evidence exists to suggest that antimony is accumulating in the food chain as a result of the industrial manufacture or use of antimony. Antimony is not a PBT substance (Persistent/Bioaccumulative/Toxic). Furthermore there seems no risk apparent to consumers when handling and installing lead-acid batteries or when using recordable media for home entertainment containing electronic articles, or for those handling massive objects containing antimony metal at ambient temperatures or handling and wearing x-ray suites during radiographic checking. No risk was identified for the general public when exposed to antimony via their food, water or the air outdoors.
Nor was any risk identified for babies additionally exposed via mother milk when feeding.

The Classification and Labelling can be found on the i2a website:
http://www.antimony.be/CLP/CLP-antimony-metal.htm

REACH compliance

Antimony was duly registered in September 2010 and is therefore compliant with the new EU chemicals legislation REACH, EC 1907/2006.

* *A read across is an approved method of filling in data gaps, using surrogate data from another chemical or group of chemicals that share common structural features. It works on the assumption that they show similar trends in physio-chemical properties and similar toxicological and environmental effects.*