

**AGREEMENT OF THE MEMBER STATE COMMITTEE**

**ON THE IDENTIFICATION OF CADMIUM SULPHIDE**

**AS A SUBSTANCE OF VERY HIGH CONCERN**

**According to Articles 57 and 59 of  
Regulation (EC) 1907/2006<sup>1</sup>**

**Adopted on 28 November 2013**

**This agreement concerns**

**Substance name: Cadmium sulphide**

**EC number: 215-147-8**

**CAS number: 1306-23-6**

**Molecular formula: CdS**

**Structural formula: Cd<sup>2+</sup> S<sup>2-</sup>**

---

<sup>1</sup>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

Sweden presented a proposal in accordance with Article 59(3) and Annex XV of the REACH Regulation (28 August 2013, submission number DH011263-64) on identification of *Cadmium sulphide* as a substance of very high concern because of its carcinogenic properties and because of its properties causing adverse effects on kidney and bone tissues (serious effects to human health that give rise to an equivalent level of concern to those of CMRs and PBTs/vPvBs).

The Annex XV dossier was circulated to Member States on 2 September 2013 and the Annex XV report was made available to interested parties on the ECHA website on the same day according to Articles 59(3) and 59(4).

Comments were received from both Member States and interested parties on the proposal.

The dossier was referred to the Member State Committee on 18 November 2013 and agreed in the written procedure of the Member State Committee with closing date of 28 November 2013.

### **Agreement of the Member State Committee in accordance with Article 59(8):**

***Cadmium sulphide* is identified as a substance of very high concern because:**

- a) it meets the criteria of Article 57 (a) of Regulation (EC) 1907/2006 (REACH) owing to its classification as carcinogen 1B<sup>2</sup> (this classification corresponds to classification as carcinogen category 2<sup>3</sup>), and**
- b) in accordance with Article 57 (f) of REACH it is a substance which causes adverse effects on kidney and bone tissues after repeated exposure, for which there is scientific evidence of probable serious effects to human health which give rise to an equivalent level of concern to those for other substances listed in paragraphs (a) to (e) of Article 57 of REACH.**

---

<sup>2</sup> Classification in accordance with Regulation (EC) No 1272/2008 Annex VI, part 3, Table 3.1 List of harmonised classification and labelling of hazardous substances as amended and adapted to technical and scientific progress by Commission Regulation (EC) No 790/2009, OJ No L 235, p. 1, 5.9.2009.

<sup>3</sup> Classification in accordance with Regulation (EC) No 1272/2008, Annex VI, part 3, Table 3.2 List of harmonised classification and labelling of hazardous substances (from Annex I to Council Directive 67/548/EEC), as amended and adapted to technical and scientific progress by Commission Regulation (EC) No 790/2009, OJ No L 235, p. 1, 5.9.2009

## **UNDERLYING ARGUMENTATION FOR IDENTIFICATION OF SUBSTANCE OF VERY HIGH CONCERN**

### **Carcinogenicity:**

#### ***Carcinogen 1B***

Cadmium sulphide is listed as Index number 048-010-00-4 in Regulation (EC) No 1272/2008<sup>4</sup> and classified in Annex VI, part 3, Table 3.1 (list of harmonised classification and labelling of hazardous substances) as carcinogen, Carc. 1B (H350: May cause cancer). The corresponding classification in Annex VI, part 3, Table 3.2 (list of harmonised classification and labelling of hazardous substances from Annex I to Council Directive 67/548/EEC) of Regulation (EC) No 1272/2008 is carcinogen, Carc. Cat. 2, R45 (May cause cancer).

Therefore, this classification of cadmium sulphide in Regulation (EC) No 1272/2008 shows that the substance meets the criteria for classification as carcinogen in accordance with Article 57(a) of REACH.

### **Equivalent level of concern:**

#### ***Properties causing adverse effects on kidney and bone tissues***

Cadmium sulphide has the ability to cause a large number of toxic effects as is evident from the harmonised classification. It is thus clear that cadmium sulphide may cause many different serious health effects in addition to the ability to cause cancer. Adverse effects on multiple organs after repeated exposure, in particular on **kidney** and **bone**, motivated the classification as STOT RE Category 1, and it is in particular effects on kidney and bone that justify the equivalent level of concern.

Cadmium sulphide is considered to fulfil the criteria according to Article 57(f), i.e. there is scientific evidence of probable serious effects to human health which give rise to "equivalent level of concern" to those for other substances listed in paragraphs (a) to (e) of Article 57 of REACH Regulation.

### **Reference:**

Support Document *Cadmium sulphide* (Member State Committee, 28 November 2013)

---

<sup>4</sup> Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.