

## **Committee for Risk Assessment**

### **RAC**

#### **Opinion**

proposing harmonised classification and labelling  
at Community level of

#### **TDCP**

**(Tris[2-chloro-1-chloromethyl]ethyl]  
phosphate)**

**ECHA/RAC/DOC No CLH-0-0000000953-71-03/F**

**Adopted**

**3 September 2010**

*15 July 2010*  
*Opinion No. CLH-0-0000000953-71-03/F*

**OPINION OF THE COMMITTEE FOR RISK ASSESSMENT  
ON A DOSSIER PROPOSING HARMONISED CLASSIFICATION AND  
LABELLING AT COMMUNITY LEVEL**

In accordance with Article 37 (4) of the Regulation (EC) No 1272/2008 (CLP Regulation), the Committee for Risk Assessment (RAC) has adopted an opinion on the proposal for harmonised classification and labelling of

**Substance Name:** *TDCP (Tris[2-chloro-1-chloromethyl]ethyl] phosphate)*

**EC Number:** *237-159-2*

**CAS Number:** *13674-87-8*

The proposal was received by RAC on 23 October 2009

**PROCESS FOR ADOPTION OF THE OPINION**

Ireland has submitted a CLH dossier containing a proposal together with the justification and background information documented in a CLH report. The CLH report was made publicly available in accordance with the requirements of the CLP Regulation at [http://echa.europa.eu/legislation/classification\\_legislation\\_en.asp](http://echa.europa.eu/legislation/classification_legislation_en.asp) on 2 September 2009. Parties concerned and MSCAs were invited to submit comments and contributions by 17 October 2009.

**ADOPTION OF THE OPINION OF RAC**

Rapporteur, appointed by RAC: *Olivier Le Curieux-Belfond*

Co-rapporteur, appointed by RAC: *Eugenio Vilanova*

The opinion takes into account the comments of MSCAs and parties concerned provided in accordance with Article 37 (4) of the CLP Regulation.

The RAC opinion on the proposed harmonised classification and labelling has been reached on *3<sup>rd</sup> September 2010*, in accordance with Article 37 (4) of the CLP Regulation, giving parties concerned the opportunity to comment. *Comments received are compiled in Annex 2.*

The RAC Opinion was adopted by *consensus* .

### **OPINION OF RAC**

The RAC adopted the opinion that *TDCP* should be classified and labelled as follows<sup>1</sup>:

#### **Classification & Labelling in accordance with the CLP Regulation EC/1272/2008:**

**Classification: Carcinogen Category 2 - H351**

**Specific concentration limits: None**

**M-factors: None**

**Notes: None**

**Labelling: Warning - GHS08 - H351**

#### **Classification & labelling in accordance with Directive 67/548/EEC**

**Classification: Carcinogen Category 3; R40**

**Specific concentration limits: None**

**Notes: None**

**Labelling: : Symbol: Xn**

**Risk Phrase: R40**

**Safety phrases: S(2)-36/37**

### **SCIENTIFIC GROUNDS FOR THE OPINION**

The opinion given above was reached following review of the proposal to classify TDCP as a carcinogen category 2 (CLP). The included data on Mutagenicity show that no classification is warranted for this hazard. Regarding the TC C&L discussions and the comments made during public consultation, male fertility data were also assessed even though no classification was originally proposed.

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<sup>1</sup> Note that not all hazard classes have been evaluated

## **Carcinogenicity**

RAC agreed by consensus that the proposal to classify TDCP as a category 2 carcinogen (i.e. Category 3 according to Directive 67/548/EEC) was justified by the findings reported by Stauffer et al (1981a). Although this 2-year carcinogenicity study in rats included a top dose that was above the maximum tolerated dose (MTD), TDCP induced a dose-related increase in tumours at multiple sites, notably renal cortical tumours and interstitial cell (Leydig cell) tumours. Most of the observed tumours were benign in nature, but had a potential to progress to malignancy. There were no studies of the carcinogenic potential in mice available.

There were no helpful human data available to further inform on the carcinogenic potential of TDCP. Also, the mechanism behind the tumours induced in rats by TDCP is unknown. However, given that this substance has given negative results in both an *in vivo* mouse bone marrow micronucleus assay and an *in vivo/in vitro* rat liver UDS assay, it does not appear to be genotoxic. For these reasons, a higher classification for carcinogenicity cannot be justified.

The rapporteurs noted that support for this classification was provided during the formal public consultation undertaken by ECHA from Reach TDCP consortium and three national authorities, whereas no information or comments opposing the classification proposal were received.

## **Reproductive Toxicity**

A harmonised classification for reproductive toxicity was not proposed by the MS dossier submitter. In comments received during the public consultation a classification as reproductive toxicant Cat. 2, H361f (CLP) resp. Repr. Cat 3, R62 (DSD) was suggested. This was considered by the dossier submitter who decided not to modify the original CLH proposal, as no new supporting data had been provided.

RAC assessed the available data provided by member-state dossier submitter for developmental toxicity and male fertility. No data were available for female fertility toxicity.

Two developmental toxicity studies in rats are available for TDCP. Both come to the conclusion that no developmental toxicity occurs without maternal toxicity.

Two studies can be used to assess the male fertility endpoint. The results of the rabbit fertility study (Stauffer Chemical Company, 1982b) were negative. Although the rat 2-year carcinogenicity study described above (Stauffer Chemical Company, 1981a) is not the appropriate tool to assess fertility, it was noticed that some non-neoplastic effects (e.g. periarteritis nodosa in testis and decreased secretory product in seminal vesicles) appeared after 24 months at lower dose than doses for which neoplastic effects were observable in testes. However, no clear-cut evidence of testes toxicity was found after 12 months. In addition, some findings made at the age of 24 months were of unclear relevance (notably 70% control animals spontaneously developed testes atrophy) to argue adverse effects on sexual function and fertility (Guidance on the Application of the CLP Criteria, section 3.7.2.3.1).

In conclusion, the comparison of the relevant TDCP data with the classification criteria leads RAC to the conclusion that there is insufficient evidence for classification of TDCP as a male reproductive toxicant.

**Additional information**

The background document, attached as Annex 1, gives the detailed scientific grounds for the Opinion.

**ANNEXES:**

Annex 1 Background Document (BD)<sup>2</sup>

Annex 2 Comments received on the CLH report, response to comments provided by the dossier submitter and rapporteurs' comments (excl. confidential information)

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<sup>2</sup> The Background Document (BD) supporting the opinion contains scientific justifications for the CLH proposal.