

**Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals**

1 December 2011

**Sub-Committee of Experts on the
Transport of Dangerous Goods**

Fortieth session

Geneva, 28 November – 7 December 2011

Item 9 of the provisional agenda

**Issues relating to the Globally Harmonized System
of Classification and Labelling of Chemicals**

**Sub-Committee of Experts on the Globally Harmonized
System of Classification and Labelling of Chemicals**

Twenty-second session

Geneva, 7 – 9 December 2011

Item 4 (c) of the provisional agenda

**Cooperation with other bodies or international
organizations 4 (c)**

**Work of the joint correspondence group on corrosivity
criteria: agenda for the meeting and additional information**

**Transmitted by the expert from the United Kingdom on behalf of the
joint correspondence group**

1. This document provides two additional pieces of information to supplement that given in UN/SCETDG/40/INF.33 – UN/SCEGHS/22/INF.18:

- (a) Proposed agenda for the meeting of the joint informal correspondence group on corrosivity criteria on 6th December 2011 (Annex 1);
- (b) Information submitted by the expert from Belgium on the corrosivity classification of zinc chloride (Annex 2)

Annex 1

Proposed agenda for the meeting of the joint informal working group on corrosivity criteria, 6th December 2011 14:30-17:30 (Room XII)

1. Welcome and introductory remarks
2. Summary of progress on workstreams a) – e) of the joint working group's terms of reference:

Background document for all workstreams: UN/SCETDG/39/INF.14 - UN/SCEGHS/21/INF.6 (United Kingdom) – (see esp. Annex 2).

- (a) Workstream a) – Verify the definition of “skin destruction” as mentioned in the Model Regulation on the transport of dangerous goods complemented with reference to the Organisation for Economic Co-operation and development (OECD) test guidelines. If the definition is not aligned with paragraph 3.2.2.4.1 in Chapter 3.2 of the GHS, propose appropriate improvements.
- (b) Workstream b) - Identify and analyse the discrepancies between assignment to subcategories 1A, 1B and 1C, based on in vitro and in vivo testing and alternative approaches (bridging principles, mixtures calculations, pH...)

Supporting document:

UN/SCETDG/40/INF.10 – UN/SCEGHS/22/INF.13 (ICCA)

- (c) Workstream c) Identify differences in assignment to categories in lists provided by different regulations and guidance documents for a few representative common substances. Analyse the underlying data and origin of these differences and use these results for the work under paragraphs a, b and d.

Supporting documents:

UN/SCETDG/40/INF.9 – UN/SCEGHS/22/INF.12 (ICCA)

UN/SCETDG/40/INF.33 - UN/SCEGHS/22/INF.18 (United Kingdom)

UN/SCETDG/40/INF.33/Add.1- UN/SCEGHS/22/INF.18/Add.1 (United Kingdom)

- (d) Workstream d) Check the way OECD guidelines are referenced and their relevance.
- (e) Workstream e) Report findings and make recommendations that meet the need of all sectors with the aim of achieving consistent classification outcomes for skin corrosivity – including general observations and implications for wider context, e.g. other hazard classes used by both GHS and TDG.

Supporting documents:

UN/SCETDG/40/INF.9 – UN/SCEGHS/22/INF.12 (ICCA)

UN/SCETDG/40/INF.10 – UN/SCEGHS/22/INF.13 (ICCA)

UN/SCETDG/40/INF.30 – UN/SCEGHS/22/INF.17 (ICPP)

3. Summary of next steps
4. Any other business

Annex 2: Information received from the expert from Belgium concerning the corrosivity classification of zinc chloride

Substance: Zinc Chloride (UN 2331 for anhydrous, UN 1840 for solution)

<i>International or official national lists/databases</i>	<i>List/database 1</i>	<i>List/database 2</i>	<i>List/database 3</i>	<i>List/database 4</i>
Identity of list/database or other source	UN Dangerous goods list	Annex VI Regulation 1272/2008/EC (CLP) including the 1st and 2nd ATP		
What is the process for agreeing classifications in this list/database?	A proposal for classification is submitted to the UNSCETDG where a decision is taken	The classifications in Table 3.2 (Directive 67/548/EEC criteria) is based on a proposals submitted to TC C&L (European expert committee) which took a decision. The classification in Table 3.1 (CLP criteria) is based on a translation from the classification in Table 3.2. New additions to Annex VI is based on comparison with criteria and not translations.		
Corrosivity classification - For transport? - For supply?	Transport or supply? Transport Classification: 8 PG III	Transport or supply? Supply Table 3.1: Skin Corr 1B Table 3.2: C; R34	Transport or supply?	Transport or supply?
Basis for classification, e.g. human experience, in vivo testing, in vitro testing, pH, read across, other experience, etc. Where testing is to a standard please specify	Not known	Not known but automatic translation of R34: Skin Corr.1B		
What documentation/sources support this classification?		Very old classification: summary record not found.		
Date of classification (and any modifications)		1971		

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Any general observations about the reasons for discrepancies in classifications of this substance in different international or official national lists/databases?	<p>The classification C; R34 in Table 3.2 of CLP regulation was based on the criteria in 1971, before the adoption of the first OECD test guidelines in 1981.</p> <p>Test criteria for R34 in 1983 (5th ATP) : if, when applied to healthy intact animal skin, full thickness destruction of skin tissue occurs as a result of up to four hours exposure, or if this result can be predicted.</p>			
Industry classifications for this substance/ classifications derived from currently available information	Source 1	Source 2	Source 3	Source 4
Source of classification, e.g. self-classification by supplier or consignor/ classification derived from current information ('derived classification').	Publicly available data from the REACH registration dossier for zinc chloride			
Corrosivity classification	Transport or supply?	Transport or supply?	Transport or supply?	Transport or supply?
- For transport? - For supply?	<p>Supply</p> <p>Under the test conditions, 1 % w/v zinc chloride was found to be severely irritating to rabbit skin, severely irritating to mouse skin and moderately irritating to guinea-pig skin.</p>			
Basis for classification, e.g. human experience, in vivo testing, in vitro testing, pH, read across, other	In vivo data : rabbit, mouse, guinea-pig.			

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experience, etc. Where testing is to a standard please specify.				
What documentation/sources support this classification?	Robust study summaries. Publication : Lansdown A.B.G. (1991) Fd Chem. Toxic. Vol.29, No 1, pp.57-64			
Date of classification (and any modifications)				
Any general observations about the reasons for discrepancies in industry classifications/ derived transport vs supply classifications of this substance (as applicable)	Four experiments were set up to compare the irritancy of six zinc compounds : two on rabbits (open patch test and occlusive patch test), one on mouse and one on guinea-pig. 0,5 ml of a solution of Zinc chloride (1%) was applied during 5 consecutive days on a 5 cm ² test site. The animals were restrained (rabbit and guinea pig) or anaesthetized (mouse) to allow test sites to dry. Results: Rabbit patch test: from the first application, skin test sites became erythematous, and by the fifth day they showed ulcerative changes. Rabbit: occlusive test : Erythema and ulceration were observed after 3 or 5 days.			
Comments / observations on the differences between the substance classifications in international and official national lists, and industry/ derived classifications (as applicable).				

Additional document submitted by the expert from Belgium – circulated to the informal correspondence group and available on request from the expert from the UK (Pierre.cruse@hse.gsi.gov.uk)

A. B. G. Lansdown, Interspecies variations in response to topical application of selected zinc compounds, Food and chemical toxicology, vol 29, No 1 (1991), 57-64