

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

Sub-Committee of Experts on the Transport of Dangerous Goods

6 June 2011

Thirty-ninth session

Geneva, 20–24 June 2011

Item 3 (a) of the provisional agenda

Listing, classification and packing: proposals of amendments to the list of dangerous goods of Chapter 3.2

Classification of mercurous chloride

Transmitted by the expert from the United Kingdom

Introduction

1. Special provision 66 in Chapter 3.3 of the UN Model Regulations states “Mercurous chloride and cinnabar are not subject to these Regulations.” SP 66 appears against UN 2024 mercury compound, liquid, n.o.s. and UN 2025 mercury compound, solid, n.o.s. (all packing groups) in the Dangerous Goods List in Chapter 3.2.
2. Various sources on the toxicity of mercurous chloride quote either an LD₅₀ oral of 210 mg/kg to rat or an LD₅₀ oral of 166 mg/kg to rat. According to this toxicity data mercurous chloride meets the criteria for classification in Division 6.1 packing group III. Several safety data sheets for mercurous chloride quote UN 2025 mercury compound, solid, n.o.s., Class 6.1 packing group III, which is correct from the above toxicity data.
3. Some other safety data sheets refer to UN 3077 environmentally hazardous substance, solid, n.o.s., Class 9 packing group III. The aquatic pollutant properties of mercurous chloride are recognized in the various modal regulations. In the IMDG Code UN 2024 and UN 2025 attract SP 66 which states that mercurous chloride is to be transported under UN 3077. This is also indicated in the index together with a “P” showing mercurous chloride is identified as a marine pollutant. In RID/ADR UN 2025 attracts SP 529 which in the second sentence states “Mercurous chloride (calomel) is a substance of Class 9 (UN No. 3077).” Other safety data sheets for mercurous chloride quote UN 2025 and UN 3077 on the same sheet for domestic and international transport respectively, presumably because of the toxicity but also taking account of what is stated in SP 66 in the IMDG Code.

Proposed next steps

4. Whilst mercurous chloride is an aquatic pollutant, its toxicity data indicate that it meets the criteria for classification in Division 6.1, packing group III and the latter hazard takes precedence.
5. From the above, mercurous chloride could be transported under the packing group III entry of UN 2025 but it may be more appropriate to allocate a specific entry for this substance.
6. The expert from the United Kingdom welcomes the views of the Sub-Committee on this matter and is prepared to come back with a formal proposal with supporting data.