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| **Committee of Experts on the Transport of Dangerous Goods  and on the Globally Harmonized System of Classification and Labelling of Chemicals 4 December 2020** |
| **Sub-Committee of Experts on the Transport of Dangerous Goods** |
| **Fifty-seventh session** |
| Geneva, 30 November 2020 – 08 December 2020  Item 3 of the provisional agenda  **Listing, classification and packing** |

Data on classification of UN1891

Transmitted by the expert from Belgium

Introduction

1. The annex to this document contains the scientific data obtained and considered during this biennium during the discussion on the classification of UN1891 as explained in ST/SG/AC.10/C.3/2020/72. In addition, INF.21 of this session contains additional data presented at the 22nd meeting of the ICAO Dangerous Goods Panel and INF.22 contains the historical information that could be retrieved on the introduction of UN1891 in the Transport of Dangerous Goods legislation.

2. A noteworthy comment that was provided on the Online Working platform put in place due to the COVID19-pandemic, is also that the classification of UN1891 under the CLP-regime is actually Acute tox 4\* rather than Acute tox 4. Meaning that according to the CLP-regulation, Acute tox 4 is considered a minimum classification and not a definitive classification.

3. See the link in paragraph 4 and Annex VI, section 1.2.1 of the CLP-regulation for further information on this minimum classification. <https://echa.europa.eu/nl/information-on-chemicals/cl-inventory-database/-/discli/details/125434>

Annex 1: Scientific data on UN1891.

Table 1: Flash- and boiling point, LD50 and LC50

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| Property    Source | Flashpoint (°C) | Boiling point (°C) | Oral toxicity LD50 (mg/kg) | Inhalation toxicity LC50 |
| BIG Kaleidos Database1 | -20 | 38 | / | / |
| Pubmed Database2 | -20 | 38 | 1350 (rat) | 26980 mg/kg (rat)  16230 mg/kg (mouse) |
| Concise International Chemical Assessment Document 42 (WHO)3, 4 | -20 | 38.4 | 1350 (rat) | 21200 mg/m³ = 4681 ppm (rat, 4h)  12300 mg/m³ = 2723 ppm  (mouse, 4h) |
| MSDS Bromoethane5 | -23 | 37 - 40°C | 1350 (rat) | 20,9 mg/l (rat, 4h)  26980 ppm (rat, 1h) |
| MacEwen&Vernot 19727 | / | / | / | 12,030 mg/m³ (= 26,986 ppm, rat, 1h) |

Table 2: Volatility and vapor pressure

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| Source | Value |
| MSDS Bromoethane5 | Volatility: 400 mm Hg |
| ILO international chemical safety card6 | Vapor pressure at 20°C: 51 kPa |

**Data Sources**

1: <https://www.big.be/en-us/Products/Kaleidos>

2: <https://pubchem.ncbi.nlm.nih.gov/compound/Bromoethane#section=Acute-Effects>

3: <https://www.who.int/ipcs/publications/cicad/en/cicad42.pdf?ua=1>,

For data on Data LC50: see source 4

4: Only for LC50:  
In the document for LC50 rat: see table 5; LC50 mice: see table 16. <https://ntp.niehs.nih.gov/ntp/htdocs/lt_rpts/tr363.pdf?utm_source=direct&utm_medium=prod&utm_campaign=ntpgolinks&utm_term=tr363>

5: <https://www.fishersci.com/store/msds?partNumber=AC154215000&productDescription=BROMOETHANE+98%25+500ML&vendorId=VN00032119&countryCode=US&language=en>

6: <http://www.ilo.org/dyn/icsc/showcard.display?p_version=2&p_card_id=1378>

7: <https://ntrs.nasa.gov/citations/19730013316>