

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

27 August 2018

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

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Geneva, 26 November-4 December 2018

Item 6 of the provisional agenda

New proposals for amendments to the Model

Regulations on the Transport of Dangerous Goods

Data sheet for UN 2383 - Dipropylamine

Transmitted by the expert from the Germany

This document provides the data sheet for document ST/SG/AC.10/C.3/2018/63

**DATA SHEET TO BE SUBMITTED TO THE UNITED NATIONS
FOR NEW OR AMENDED CLASSIFICATION OF SUBSTANCES**

Submitted by Germany.....Date 06.08.2018.....

Supply all relevant information including sources of basic classification data. Data should relate to the product in the form to be transported. State test methods. Answer all questions - if necessary state "not known" or "not applicable" - If data is not available in the form requested, provide what is available with details. Delete inappropriate words.

Section 1. SUBSTANCE IDENTITY

1.1 Chemical name	Dipropylamine
1.2 Chemical formula	C ₆ H ₁₅ N
1.3 Other names/synonyms	N-propylpropan-1-amine
1.4.1 UN number	2383
1.4.2 CAS number	142-84-7

1.5 Proposed classification for the Recommendations

1.5.1 proper shipping name (3.1.2) ¹
1.5.2 class/division3..... subsidiary risk(s)8, 6.1..... packing group ...II.....
1.5.3 proposed special provisions, if any386.....
1.5.4 proposed packing instruction(s)P001 IBC02.....

Section 2. PHYSICAL PROPERTIES

2.1 Melting point or range
2.2 Boiling point or range
2.3 Relative density at:
2.3.1 0 °C
2.3.2 10 °C

2.4 Vapour pressure at :

2.4.1 25 °C
2.4.2 50 °C
2.4.3 67 °C

2.5 Viscosity at 20 °C²

2.6 Solubility in water

2.7 Physical state at 20°C (2.2.1.1¹) solid/liquid/gas²

2.8 Appearance at normal transport temperatures,
including colour and odour

2.9 Other relevant physical properties

Section 3. FLAMMABILITY

3.1 Flammable vapour
3.1.1 Flash point (2.3.3¹)

3.1.2 Is combustion sustained? (2.3.1.3¹)

3.2 Autoignition temperature

3.3 Flammability range (LEL/UEL)

3.4 Is the substance a flammable solid? (2.4.2¹)

3.4.1 If yes, give details

3.5. Additional information - ECHA Dossier:

Section 4. CHEMICAL PROPERTIES

4.1 Does the substance require inhibition/stabilization or other treatment such as nitrogen blanket to prevent hazardous reactivity ? yes/no

If yes, state:

4.1.1 Inhibitor/stabilizer used

4.1.2 Alternative method

4.1.3 Time effective at 55 °C

4.1.4 Conditions rendering it ineffective

4.2 Is the substance an explosive according to paragraph 2.1.1.1? (2.1¹) yes/no

4.2.1 If yes, give details

4.3 Is the substance a desensitized explosive? (2.4.2.4¹) yes/no

4.3.1 If yes, give details

4.4 Is the substance a self-reactive substance? (2.4.1¹) yes/no

If yes, state:

4.4.1 exit box of flow chart

What is the self-accelerating decomposition temperature (SADT) for a 50 kg package? °C

Is the temperature control required? (2.4.2.3.4¹) yes/no

4.4.2 proposed control temperature for a 50 kg package °C

4.4.3 proposed emergency temperature for a 50 kg package °C

4.5 Is the substance pyrophoric? (2.4.3¹) yes/no

4.5.1 If yes, give details

4.6 Is the substance liable to self-heating? (2.4.3¹) yes/no

4.6.1 If yes, give details

4.7 Is the substance an organic peroxide (2.5.1¹) yes/no

If yes state:

4.7.1 exit box of flow chart

What is the self accelerating decomposition temperature (SADT) for a 50 kg package? °C

Is temperature control required? (2.5.3.4.1¹) yes/no

- 4.7.2 proposed control temperature for a 50 kg package °C
- 4.7.3 proposed emergency temperature for a 50 kg package °C
- 4.8 Does the substance in contact with water emit flammable gases? (2.4.4¹) yes/no
- 4.8.1 If yes, give details
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- 4.9 Does the substance have oxidizing properties (2.5.1¹) yes/no

The HSDB database provides information, from several sources, relating to oxidizing properties of the substance Chlorine dioxide, in particular explosive potential if contact with organic materials.

Explodes when heated or by reaction with organics. [1]
Reacts violently with organic materials. [2]
Incompatible with other combustible materials, organic matters, and solvents. [3]
The gas and liquid are violently decomposed by organic materials. The gas will decompose at temperatures below the boiling point of water. [4]

- 4.9.1 If yes, give details
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-
-
- 4.10 Corrosivity (2.8¹) to:
- 4.10.1 mild steel mm/year at °C
- 4.10.2 aluminium mm/year at °C
- 4.10.3 other packaging materials (specify)
- mm/year at °C
- mm/year at °C
- 4.11 Other relevant chemical properties
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Section 5. HARMFUL BIOLOGICAL EFFECTS

- 5.1 LD₅₀, oral (2.6.2.1.1¹)495 mg/kg Animal speciesrat.....
- 5.2 LD₅₀, dermal (2.6.2.1.2¹)925 ... mg/kg Animal speciesrabbit.....
- 5.3 LC₅₀, inhalation (2.6.2.1.3¹)4,4..... mg/litre Exposure time4..... hours
- Animal speciesrat.....
- 5.4 Saturated vapour concentration at 20 °C (2.6.2.2.4.3i) ml/m₃
- 5.5 Skin exposure (2.8¹) results Exposure time--..... hours/minutes
- Animal species
- 5.6 Other data
-
-
-
- 5.7 Human experience
-
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Section 6. SUPPLEMENTARY INFORMATION

- 6.1 Recommended emergency action
- 6.1.1 Fire (include suitable and unsuitable extinguishing agents)
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6.1.2 Spillage

6.2 Is it proposed to transport the substance in:

6.2.1 Bulk Containers (6.8¹) yes/no

6.2.2 Intermediate Bulk Containers (6.5¹)? yes/no

6.2.3 Portable tanks (6.7¹)? yes/no

If yes, give details in Sections 7, 8 and/or 9.

Section 7. BULK CONTAINERS (only complete if yes in 6.2.1)

7.1 Proposed type(s)

Section 8. INTERMEDIATE BULK CONTAINERS (IBCs) (only complete if yes in 6.2.2)

8.1 Proposed type(s)

Section 9. MULTIMODAL TANK TRANSPORT (only complete if yes in 6.2.3)

9.1 Description of proposed tank (including IMO tank type if known)

9.2 Minimum test pressure

9.3 Minimum shell thickness

9.4 Details of bottom openings, if any

9.5 Pressure relief arrangements

9.6 Degree of filling

9.7 Unsuitable construction materials
