An ISO 9001: 2015 & GMP Certified Company Office: No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

Tel: +91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name: D-10-Camphor sulphonic acid sodium salt, 98%

Product Code: C 1561a CAS No: 34850-66-3

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification OTTO CHEMIE PVT LTD

No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number

Phone no.: + 91 98200 41841 (10:00 am - 06:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation.

Category 1B

H314

Full text of H statements: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

C: R34

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display

Hazard pictograms (CLP):

GHS05

Signal word (CLP):

Hazard statements (CLP)

Precautionary statements (CLP)

H314 - Causes severe skin burns and eye damage.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER/doctor

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name D-10-Camphor sulphonic acid sodium salt,

34850-66-3 CAS-No.

Full text of R- and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

First-aid measures after skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor.

First-aid measures after eve contact Rinse cautiously with water for several minutes. Remove contact lenses, if present

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001: 2015 & GMP Certified Company
Office: No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

Tel: +91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

and easy to do. Continue rinsingImmediately call a POISON CENTER/doctor.

First-aid measures after ingestion Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects Causes severe skin burns and eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures Avoid contact with skin, eyes and clothing

6.1.2. For emergency responders

Protective equipment Use personal protective equipment as required.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Clean up immediately by sweeping or vacuum.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures Comply with applicable regulations.

Storage conditions Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection Protective gloves

Eye protection Chemical goggles or face shield

Skin and body protection Wear suitable protective clothing

Respiratory protection Wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical state : Solid

Physical state : Solid
Molecular mass : 232.5 g/mol
Colour : White powder.
Odour : No data available

pH : 1.2 - 1.4

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 200 °C

Freezing point : No data available Boiling point : No data available

DISCLAIMER

Odour threshold

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

: No data available

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001: 2015 & GMP Certified Company
Office: No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

Tel: + 91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

Flash point : No data available Auto-ignition temperature : No data available Decomposition temperature · No data available Flammability (solid, gas) : No data available Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density No data available Solubility : No data available : No data available Log Pow Viscosity, kinematic : No data available : No data available Viscosity, dynamic Explosive properties : No data available Oxidising properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Explosive limits

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. High temperature. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

: No data available

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001: 2015 & GMP Certified Company Office: No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

Tel: +91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal

recommendations

: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN 14.1. UN number UN-No. (ADR) : 3261 UN-No. (IMDG) 3261 UN-No. (IATA) 3261 UN-No. (ADN) 3261 UN-No. (RID) $\cdot 3261$ 14.2. UN proper shipping name : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. Proper Shipping Name (ADR) Proper Shipping Name (IMDG)

Proper Shipping Name (IATA) : Corrosive solid, acidic, organic, n.o.s. Proper Shipping Name (ADN)

Proper Shipping Name (RID)

CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S., 8, III, (E)
UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S., 8, III, (E) Transport document description (ADR) Transport document description (IMDG)

Transport document description (IATA) : UN 3261 Corrosive solid, acidic, organic, n.o.s., 8, III

Transport document description (ADN) UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S., 8, III Transport document description (RID) : UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S., 8, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8 Danger labels (ADR) 8

IMDG

Transport hazard class(es) (IMDG) . 8 Danger labels (IMDG) : 8

IATA

Transport hazard class(es) (IATA) . 8 Hazard labels (IATA) : 8

ADN

Transport hazard class(es) (ADN) : 8 Danger labels (ADN) : 8

RID

Transport hazard class(es) (RID) : 8 Danger labels (RID) : 8

14.4. Packing group Packing group (ADR) : III Packing group (IMDG) : 111 Packing group (IATA) : 111 Packing group (ADN) : 10 Packing group (RID) : 111

14.5. Environmental hazards Dangerous for the environment · No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Marine pollutant

Classification code (ADR) : C4 Special provisions (ADR) : 274

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

· No

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001: 2015 & GMP Certified Company
Office: No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

Tel: +91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

Limited quantities (ADR) : 5kg Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : B3
Mixed packing provisions (ADR) : MP10

Portable tank and bulk container

instructions (ADR)

: T1

Portable tank and bulk container special

provisions (ADR)

: TP33

Tank code (ADR) : SGAV, L4BN

Vehicle for tank carriage : AT Transport category (ADR) : 3

Special provisions for carriage - Bulk

(ADR)

: VC1, VC2, AP7 Hazard identification number (Kemler No.) : 80

azard identification number (itemier ivo.)

Orange plates:

Tunnel restriction code (ADR) : E EAC code : 2X

- Transport by sea
Special provisions (IMDG) : 223, 274

Packing instructions (IMDG) : P002, LP02
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B3
Tank instructions (IMDG) : T1
Tank special provisions (IMDG) : TP33

Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG)

Properties and observations (IMDG)

Causes burns to skin, eyes and mucous membranes.

: E1

Y845

F-A

S-B

MFAG-No : 154

- Air transport

PCA Excepted quantities (IATA)
PCA Limited quantities (IATA)
PCA limited quantity max net quantity

(IATA)

: 5kg
PCA packing instructions (IATA)
: 860
PCA max net quantity (IATA)
: 25kg
CAO packing instructions (IATA)
: 864
CAO max net quantity (IATA)
: 100kg
Special provisions (IATA)
: A3, A803
ERG code (IATA)
: 8L

- Inland waterway transport

Classification code (ADN) : C4

Special provisions (ADN) : 274

Limited quantities (ADN) : 5 kg

Excepted quantities (ADN) : E1

Equipment required (ADN) : PP, EP

Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : C4
Special provisions (RID) : 274
Excepted quantities (RID) : E1

Packing instructions (RID) : P002, IBC08, LP02, R001

Special packing provisions (RID) : B3
Mixed packing provisions (RID) : MP10

Portable tank and bulk container

instructions (RID)

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

An ISO 9001: 2015 & GMP Certified Company Office: No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

Tel: +91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

: T1

Portable tank and bulk container special

provisions (RID)

: TP33

Tank codes for RID tanks (RID) : SGAV, L4BN

Transport category (RID) . 3

Special provisions for carriage - Bulk

(RID)

: VC1, VC2, AP7

Colis express (express parcels) (RID) : CE11 Hazard identification number (RID) : 80

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

D-10 CAMPHOR-SULPHONIC ACID Extra Pure is not on the REACH Candidate List D-10 CAMPHOR-SULPHONIC ACID Extra Pure is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BlmSchV

Netherlands

SZW-lijst van kankerverwekkende stiffen SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de

voortplanting giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen -

Vruchtbaarheid

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

The substance is not listed The substance is not listed

The substance is not listed

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling

: The substance is not listed

Denmark

Recommendations Danish Regulation: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment No additional information available

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

DISCI AIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product