

Creation Date 04-Nov-2010 Revision Date 10-Dec-2021 Revision Number 3

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: 24 LEB Cat No.: CM1128

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

Recommended Use Laboratory chemicals. Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company Oxoid Ltd

Wade Road

Basingstoke, Hants, UK

RG24 8PW

Tel: +44 (0) 1256 841144

EU entity/business name Oxoid Deutschland GmbH

Postfach 10 07 53

D-46483 Wesel GERMANY

Tel: + 49 (0) 281 1520 Fax: 49 (0) 281 1521

E-mail address mbd-sds@thermofisher.com

1.4. Emergency telephone number

Chemtrec EU: 001-703-527-3887 Chemtrec US: (800) 424-9300

For customers in Switzerland:

Tox Info Suisse Emergency Number: 145 (24hr)

Tox Info Suisse: +41-44 251 51 51 (Emergency number from abroad)

Chemtrec (24h) Toll-Free: 0800 564 402 Chemtrec Local: +41-43 508 20 11 (Zurich)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Based on available data, the classification criteria are not met

24 LEB Revision Date 10-Dec-2021

Health hazards

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Category 2 (H315) Category 2 (H319)

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements



Signal Word

Warning

Hazard Statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary Statements

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| Component | CAS No | EC No | Weight % | CLP Classification - Regulation (EC) No |
|------------------|-----------|-------------------|----------|---|
| | | | | 1272/2008 |
| Lithium chloride | 7447-41-8 | EEC No. 231-212-3 | 21.75 | Acute Tox. 4 (H302) |
| | | | | Skin Irrit. 2 (H315) |
| | | | | Eye Irrit. 2 (H319) |
| Sodium hydroxide | 1310-73-2 | 215-185-5 | 0.59 | Skin Corr. 1A (H314) |
| · | | | | Eye Dam. 1 (H318) |

| Component | Specific concentration limits (SCL's) | M-Factor | Component notes |
|------------------|--|----------|-----------------|
| Sodium hydroxide | Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Eye Irrit. 2 :: 0.5%<=C<2% Skin Irrit. 2 :: 0.5%<=C<2% | - | - |

24 LEB Revision Date 10-Dec-2021

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Obtain medical attention if irritation persists.

Ingestion Do NOT induce vomiting. Get medical attention. Clean mouth with water and drink

afterwards plenty of water.

Inhalation Remove to fresh air. Get medical attention if symptoms occur.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

No information available.

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

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

None under normal use conditions.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

24 LEB Revision Date 10-Dec-2021

Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid dust formation. Use personal protective equipment as

6.2. Environmental precautions

required.

Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid dust formation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place.

Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany)

Storage Class/LGK 13

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s): **UK** - EH40/2005 Work Exposure Limits, Third edition. Published 2018. **IRE** - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority. **CH** - The Government of Switzerland has set a directive on limit values for working materials (Grenzwerte am arbeitplatz) which is based on the Swiss Federal Regulation "Verordnung über die Verhütung von Unfällen und Berufskrankheiten". This directive is administered, periodically revised and enforced by SUVA (Swiss National Accident Insurance Fund).

| Component | European Union | The United Kingdom | France | Belgium | Spain |
|------------------|----------------|--------------------|-----------------------------------|-------------|---------------------|
| Sodium hydroxide | | 2 mg/m³ STEL | TWA / VME: 2 mg/m ³ (8 | 2 mg/m³ VLE | STEL / VLA-EC: 2 |
| · | | - | heures). | = | mg/m³ (15 minutos). |

| Component | Italy | Germany | Portugal | The Netherlands | Finland |
|------------------|-------|------------------------|------------------------------|-----------------|------------------------------|
| Sodium hydroxide | | 2 mg/m3 TWA (inhalable | Ceiling: 2 mg/m ³ | | Ceiling: 2 mg/m ³ |
| - | | fraction) | | | |

| Component | Austria | Denmark | Switzerland | Poland | Norway |
|------------------|-------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Sodium hydroxide | MAK-KZGW: 4 mg/m ³ | Ceiling: 2 mg/m ³ | STEL: 2 mg/m ³ 15 | STEL: 1 mg/m ³ 15 | Ceiling: 2 mg/m ³ |

24 LEB Revision Date 10-Dec-2021

| 15 Minuten | Minuten | minutach | |
|--------------------------------|----------------------------|------------------------------|--|
| MAK-TMW: 2 mg/m ³ 8 | TWA: 2 mg/m ³ 8 | TWA: 0.5 mg/m ³ 8 | |
| Stunden | Stunden | godzinach | |

| Component | Bulgaria | Croatia | Ireland | Cyprus | Czech Republic |
|------------------|----------------------------|-----------------------------------|----------------------------------|--------|------------------------------|
| Sodium hydroxide | TWA: 2.0 mg/m ³ | STEL-KGVI: 2 mg/m ³ 15 | STEL: 2 mg/m ³ 15 min | | TWA: 1 mg/m ³ 8 |
| • | _ | minutama. | _ | | hodinách. |
| | | | | | Ceilina: 2 ma/m ³ |

| Component | Estonia | Gibraltar | Greece | Hungary | Iceland |
|------------------|---|-----------|-------------------------------|---|---------------|
| Sodium hydroxide | TWA: 1 mg/m ³ 8 tundides. STEL: 2 mg/m ³ 15 minutites. | | STEL: 2 mg/m³ TWA: 2 mg/m³ | STEL: 2 mg/m³ 15 percekben. CK TWA: 1 mg/m³ 8 órában. AK | STEL: 2 mg/m³ |

| Component | Latvia | Lithuania | Luxembourg | Malta | Romania |
|------------------|----------------------------|------------------------------|------------|-------|---------|
| Sodium hydroxide | TWA: 0.5 mg/m ³ | Ceiling: 2 mg/m ³ | | | |

| Component | Russia | Slovak Republic | Slovenia | Sweden | Turkey |
|------------------|--------|--------------------------|----------|------------------------------------|--------|
| Sodium hydroxide | | TWA: 2 mg/m ³ | | Binding STEL: 2 mg/m ³ | |
| | | _ | | 15 minuter KGV | |
| | | | | TLV: 1 mg/m ³ 8 timmar. | |
| | | | | NGV | |

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

| Component | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|---|------------------------------|------------------------------------|--------------------------------|-----------------------------------|
| Lithium chloride 7447-41-8 (21.75) | | | | DNEL = 73.2mg/kg bw/day |

| Component | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|---|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Lithium chloride 7447-41-8 (21.75) | | DNEL = 30mg/m ³ | | DNEL = 10mg/m ³ |
| Sodium hydroxide 1310-73-2 (0.59) | | | DNEL = 1mg/m ³ | |

Predicted No Effect Concentration (PNEC)

See values below.

| Ī | Component | Fresh water | Fresh water | Water Intermittent | Microorganisms in | Soil (Agriculture) |
|---|---------------------|------------------|------------------|---------------------------|-------------------|--------------------|
| L | | | sediment | | sewage treatment | |
| Ī | Lithium chloride | PNEC = 10.4 mg/L | PNEC = 49.9mg/kg | PNEC = 10.4 mg/L | PNEC = 140.2mg/L | PNEC = 4.13mg/kg |
| L | 7447-41-8 (21.75) | | sediment dw | | | soil dw |

24 LEB Revision Date 10-Dec-2021

 Component
 Marine water sediment
 Marine water sediment
 Marine water Intermittent
 Food chain Intermittent

 Lithium chloride 7447-41-8 (21.75)
 PNEC = 1.04mg/L sediment dw
 PNEC = 4.99mg/kg sediment dw

8.2. Exposure controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Goggles (European standard - EN 166)

Hand Protection Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments |
|-------------------|-------------------|-----------------|-------------|-----------------------|
| Disposable gloves | See manufacturers | - | EN 374 | (minimum requirement) |
| | recommendations | | | |

Skin and body protection Long sleeved clothing.

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

Solid

Page 6/12

and maintained properly

Large scale/emergency use In case of insufficient ventilation, wear suitable respiratory equipment

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Powder Solid

Appearance Light brown

Odor
Odor No information available
No data available
Not applicable
Flammability (liquid)
Not applicable

Flammability (liquid) Not applicable No information available

Explosion Limits No data available

Flash Point Not applicable Method - No information available

Autoignition Temperature Not applicable

24 LEB Revision Date 10-Dec-2021

Decomposition Temperature No data available

pH 7.2 - 7.6 @ 25°C

Viscosity Not applicable Solid

Water Solubility Soluble in water

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Lithium chloride -2.66

Vapor PressureNo data availableDensity / Specific GravityNo data availableBulk DensityNo data available

Vapor Density Not applicable Solid

Particle characteristics No data available

9.2. Other information

Evaporation Rate Not applicable - Solid

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under recommended storage conditions. Hygroscopic.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

10.4. Conditions to avoid

Protect from direct sunlight. Protect from moisture.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None under normal use conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information Product does not present an acute toxicity hazard based on known or supplied information

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

Toxicology data for the components

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation | |
|------------------|--------------------------|----------------------------|---------------------|--|
| Lithium chloride | LD50 = 526 mg/kg (Rat) | >2000 mg/kg (Rat) | >5.57 mg/L/4h (Rat) | |
| Sodium hydroxide | LD50 = 325 mg/kg (Rat) | LD50 = 1350 mg/kg (Rabbit) | - | |

24 LEB Revision Date 10-Dec-2021

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory Skin

(e) germ cell mutagenicity;

No data available No data available

No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

No data available (i) STOT-repeated exposure;

Target Organs No information available.

(j) aspiration hazard; Not applicable

Solid

Symptoms / effects,both acute and No information available.

delayed

11.2. Information on other hazards

Endocrine Disrupting Properties Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects

| Component | Component Freshwater Fish | | Freshwater Algae |
|--|--|--|------------------|
| Lithium chloride EC50: 158 mg/L/96h (rainbow | | | |
| | trout) | | |
| Sodium hydroxide | LC50: = 45.4 mg/L, 96h static (Oncorhynchus mykiss) | | - |

| Component | Microtox | M-Factor |
|------------------|----------|----------|
| Sodium hydroxide | - | |

12.2. Persistence and degradability

24 LEB Revision Date 10-Dec-2021

Persistence

Soluble in water, Persistence is unlikely, based on information available.

12.3. Bioaccumulative potential Bioaccumulation is unlikely

 Component
 log Pow
 Bioconcentration factor (BCF)

 Lithium chloride
 -2.66
 No data available

12.4. Mobility in soil The product is water soluble, and may spread in water systems . Will likely be mobile in the

environment due to its water solubility. Highly mobile in soils

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects
Persistent Organic Pollutant
Ozone Depletion Potential

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused

Products

Dispose of in accordance with federal, state and local regulations. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and

hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations. Dispose of this container to hazardous or

special waste collection point.

European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used. Do not empty into drains.

Switzerland - Waste Ordinance Disposal should be in accordance with applicable regional, national and local laws and

regulations. Ordinance on the Avoidance and the Disposal of Waste (Waste Ordinance,

ADWO) SR 814.600

https://www.fedlex.admin.ch/eli/cc/2015/891/en

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

24 LEB Revision Date 10-Dec-2021

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

IATA Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No | EINECS | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
|------------------|-----------|-----------|--------|-----|-------|------|----------|------|------|
| Lithium chloride | 7447-41-8 | 231-212-3 | - | - | Х | X | KE-22552 | X | X |
| Sodium hydroxide | 1310-73-2 | 215-185-5 | - | - | X | Х | KE-31487 | X | Х |

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|------------------|-----------|------|---|-----|------|------|-------|-------|
| Lithium chloride | 7447-41-8 | Х | ACTIVE | Х | - | X | Х | X |
| Sodium hydroxide | 1310-73-2 | Х | ACTIVE | X | - | X | Х | Х |

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

| Component | , | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | , |
|------------------|---|---|---|
| Sodium hydroxide | - | Use restricted. See item 75. (see link for restriction details) | - |

https://echa.europa.eu/substances-restricted-under-reach

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|------------------|-----------|---|--|
| Lithium chloride | 7447-41-8 | Not applicable | Not applicable |
| Sodium hydroxide | 1310-73-2 | Not applicable | Not applicable |

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

24 LEB Revision Date 10-Dec-2021

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification Water endangering class = 1 (self classification)

| Component | Germany - Water Classification (VwVwS) | Germany - TA-Luft Class |
|------------------|--|-------------------------|
| Lithium chloride | WGK1 | |
| Sodium hydroxide | WGK1 | |

Swiss Regulations

Article 4 para. 4 of the Ordinance on the protection of young people in the workplace (SR 822.115) and Article 1 lit. f of the EAER regulation on hazardous work and young people (SR 822.115.2).

Take note on Article 13 Maternity Ordinance (SR 822.111.52) with regards expectant and nursing mothers.

| Component | Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81) | Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC) | Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure | |
|--------------------|--|---|--|--|
| Sodium hydroxide | Prohibited and Restricted | | | |
| 1310-73-2 (0.59) | Substances | | | |

15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances

ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

24 LEB Revision Date 10-Dec-2021

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air

Transport Association

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate

VOC - (volatile organic compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards

Health Hazards

Environmental hazards

On basis of test data
Calculation method
Calculation method

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Creation Date 04-Nov-2010 **Revision Date** 10-Dec-2021

Revision Summary Update to CLP Format.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No. 1907/2006

For Switzerland - Compiled in accordance with the technical provisions referred to in Annex 2, Number 3, ChemO (SR 813.11 - Ordinance on Protection against Dangerous Substances and Preparations).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet