



Be Right™

SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Issue Date 25-Dec-2005

Revision Date 13-Jul-2023

Version 3.4

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

1.1. Product identifier

Product Code(s) LCK380-1

Product Name LCK 380 TOC/COT, Indikatorküvette/Indicator Cuvette; 1/4

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

Recommended Use Water Analysis. Determination of Total Organic Carbon. Determination of carbonate.

Uses advised against Consumer use

1.3. Details of the supplier of the safety data sheet

Supplier

HACH UK
Laser House
Ground Floor, Suite B
Waterfront Quay, Salford Quays
GB - Manchester, M50 3XW
Tel. +44 (0) 161 872 1487
info-uk@hach.com

HACH Ireland
Unit 34 GB Business Park
Little Island
IRL-Co. Cork
T45 H681
Tel. +353 (0)146 02 522
info-ie@hach.com

1.4. Emergency telephone number

UK: Chemtrec: +44 20 3807 3798
IE: National Poisons Information Centre (NPIC) 01 809 2566 (24/7)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Precautionary statements

2.3. Other hazards

No information available.

PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT)

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | CAS No. EC No. Index No. | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|--------------------|---|----------|--|--|----------|-------------------------|
| Boric acid (H3BO3) | 10043-35-3 233-139-2 005-007-00-2 | <0.1% | Repr. 1B - H360FD | - | - | - |
| Sodium hydroxide | 1310-73-2 215-185-5 011-002-00-6 | <0.1% | Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318 | Eye Irrit. 2 :: 0.5%<=C<2% Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Skin Irrit. 2 :: 0.5%<=C<2% | - | - |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate No information available

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|----------------------------------|------------|---------------|---|--|---|
| Boric acid (H3BO3) 10043-35-3 | 2660 mg/kg | None reported | None reported | None reported | None reported |

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

| | |
|---|--|
| General advice | Take off contaminated clothing and shoes immediately. |
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor. |
| Ingestion | Rinse mouth. |
| Self-protection of the first aider | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). 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

| | |
|-----------------|---------------------------|
| Symptoms | No information available. |
|-----------------|---------------------------|

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

| | |
|------------------------|------------------------|
| Note to doctors | 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. Product itself does not burn. |
| Unsuitable extinguishing media | No information available. |

5.2. Special hazards arising from the substance or mixture

| | |
|---|--|
| Specific hazards arising from the chemical | Thermal decomposition can lead to release of irritating and toxic gases and vapours. |
|---|--|

5.3. Advice for firefighters

| | |
|---|--|
| Special protective equipment and precautions for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |
| Additional information | Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|---------------------------------|---|
| Personal precautions | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Evacuate personnel to safe areas. |
| For emergency responders | Use personal protection recommended in Section 8. |

6.2. Environmental precautions

| | |
|----------------------------------|---|
| Environmental precautions | 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

| | |
|--|--|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Take up mechanically, placing in appropriate containers for disposal. |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. |

6.4. Reference to other sections

| | |
|------------------------------------|--|
| Reference to other sections | See section 8 for more information. See section 13 for more information. |
|------------------------------------|--|

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

| | |
|---------------------------------------|---|
| Advice on safe handling | Ensure adequate ventilation. |
| General hygiene considerations | Take off all contaminated clothing and wash it before reuse. Avoid contact with skin, eyes or clothing. Barrier creams may help to protect the exposed areas of skin. |

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

| | |
|--------------------------------------|--|
| Specific use(s) | Analytical reagent. |
| Risk Management Methods (RMM) | The information required is contained in this Safety Data Sheet. |

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| | |
|------------------------|--|
| Exposure Limits | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies |
|------------------------|--|

| Chemical name | European Union | United Kingdom | Ireland |
|----------------------------------|----------------|---------------------------|---|
| Boric acid (H3BO3) 10043-35-3 | - | - | TWA: 2 mg/m ³ STEL: 6 mg/m ³ |
| Sodium hydroxide 1310-73-2 | - | STEL: 2 mg/m ³ | STEL: 2 mg/m ³ |

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

Additional information No information available.

8.2. Exposure controls

Engineering controls Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Personal protective equipment
Eye/face protection

Wear safety glasses with side shields (or goggles).

Hand protection

Barrier creams may help to protect the exposed areas of skin. Wear suitable gloves. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374-1:2016 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III acco.

| Gloves | | | |
|----------------------|---------------------------------------|-----------------|--------------------|
| Duration of contact | PPE - Glove material | Glove thickness | Break through time |
| Long term (repeated) | Wear protective Viton™ gloves | 0,70 mm | >480 minutes |
| Short term | Wear protective nitrile rubber gloves | 0,20 mm | >30 minutes |

Skin and body protection Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse. Long sleeved clothing.

Respiratory protection Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Recommended Filter type: ABEK-P3.

General hygiene considerations Take off all contaminated clothing and wash it before reuse. Avoid contact with skin, eyes or clothing. Barrier creams may help to protect the exposed areas of skin.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Liquid

Colour blue

Odour Odourless

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------|-------------------|-------------------------|
| Molecular weight | No data available | |
| pH | 10 | @ 20 °C |

| | | |
|--|-------------------|---------|
| Melting point / freezing point | No data available | |
| Initial boiling point and boiling range | No data available | |
| Evaporation rate | No data available | |
| Vapour pressure | No data available | |
| Relative vapor density | No data available | |
| Partition coefficient | No data available | |
| Soil Organic Carbon-Water Partition Coefficient | No data available | |
| Autoignition temperature | No data available | |
| Decomposition temperature | No data available | |
| Dynamic viscosity | No data available | |
| Kinematic viscosity | No data available | |
| Relative density | 1.0 g/mL | @ 20 °C |

Solubility(ies)**Water solubility**

| Water solubility classification | Water solubility | Water Solubility Temperature |
|---------------------------------|------------------|------------------------------|
| Completely soluble | > 10000 mg/L | 25 °C / 77 °F |

Solubility in other solvents

| Chemical Name | Solubility classification | Solubility | Solubility Temperature |
|---------------|---------------------------|-------------------|--------------------------|
| None reported | No information available | No data available | No information available |

Metal Corrosivity

| | |
|--------------------------------|-------------------|
| Steel Corrosion Rate | No data available |
| Aluminum Corrosion Rate | No data available |

Explosive properties

| | |
|------------------------------|-------------------|
| Upper explosion limit | No data available |
| Lower explosion limit | No data available |

Flammable properties

| | |
|--------------------|-------------------|
| Flash point | No data available |
|--------------------|-------------------|

Flammability

| | |
|----------------------------------|-------------------|
| Upper flammability limit: | No data available |
| Lower flammability limit | No data available |

Oxidising properties No data available.

Bulk density No data available

9.2. Other information

No information available.

Section 10: STABILITY AND REACTIVITY**10.1. Reactivity**

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

Section 11: TOXICOLOGICAL INFORMATION**Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|----------------------|---------------|---------------|-----------------------|--|
| Potassium chloride | Rat LD ₅₀ | 2600 mg/kg | None reported | None reported | IUCLID |
| Boric acid (H ₃ BO ₃) | Rat LD ₅₀ | 2660 mg/kg | None reported | None reported | IUCLID |

Acute Toxicity Estimate (ATE)**Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity.

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--------------------|-------------|---------|---------------|---------------|-------------------------------------|--|
| Boric acid (H3BO3) | Draize Test | Rabbit | 500 mg | 24 hours | Not corrosive or irritating to skin | ECHA |
| Sodium hydroxide | Patch test | Human | 20 mg | 24 hours | Corrosive to skin | RTECS |

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--------------------|-------------|---------|---------------|---------------|-------------------------------------|--|
| Boric acid (H3BO3) | Draize Test | Rabbit | 100 mg | 24 hours | Not corrosive or irritating to eyes | ECHA |
| Sodium hydroxide | Draize Test | Rabbit | 0.05 mg | 24 hours | Corrosive to eyes | RTECS |

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

Skin Sensitization Exposure Route:

| Chemical name | Test method | Species | Results | Key literature references and sources for data |
|--------------------|---------------------------------------|------------|---|--|
| Boric acid (H3BO3) | OECD Test No. 406: Skin Sensitisation | Guinea pig | No sensitisation responses were observed. | ECHA |

STOT - single exposure

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--------------------|-------------------------|---------------|---------------|---|--|
| Potassium chloride | Man LD _{Lo} | 20 mg/kg | None reported | None reported | RTECS |
| Boric acid (H3BO3) | Man LD _{Lo} | 429 mg/kg | None reported | Kidney, Ureter, or Bladder Changes in tubules (including acute renal failure, acute tubular necrosis) | RTECS |

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--------------------|-------------------------|---------------|---------------|--|--|
| Potassium chloride | Rat TD _{Lo} | 75600 mg/kg | 42 days | Kidney, Ureter, or Bladder Urine volume increased | RTECS |
| Boric acid (H3BO3) | Rat NOAEL | 100 mg/kg | 730 days | Nutritional and Gross Metabolic Weight gain Food intake | ECHA |

Inhalation (Dust/Mist) Exposure Route:

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--------------------|---------------|-----------------------|---------------|-----------------------------------|--|
| Boric acid (H3BO3) | Rat NOAEC | 470 mg/m ³ | 70 days | No toxicological effects observed | ECHA |

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture invitro **Data** No data available.

Substance invitro **Data** Test data reported below.

| Chemical name | Test | Cell Strain | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--------------------|----------------------------|-------------------------------|---------------|---------------|---------------------------------------|--|
| Potassium chloride | Mutation in microorganisms | Mouse lymphocyte | 2048 mmol/L | None reported | Positive test result for mutagenicity | RTECS |
| Boric acid (H3BO3) | Mutation in microorganisms | <i>Salmonella typhimurium</i> | 2.5 mg/plate | None reported | Negative | ECHA |
| Thymol blue | DNA adduct | Escherichia coli | 0.05 mmol/L | None reported | Positive test result for mutagenicity | RTECS |

Mixture invivo **Data** No data available.

Substance invivo **Data** Test data reported below.

Oral Exposure Route:

| Chemical name | Test | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--------------------|---------------------------|---------|---------------|---------------|---------------------------------------|--|
| Potassium chloride | Unscheduled DNA synthesis | Rat | 1.5 mg/kg | None reported | Positive test result for mutagenicity | RTECS |
| Boric acid (H3BO3) | Micronucleus test | Mouse | 3500 mg/kg | 2 days | Negative test result for mutagenicity | ECHA |

Carcinogenicity

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance No data available.

Reproductive toxicity

Based on available data, the classification criteria are not met.

| Chemical name | European Union |
|--------------------|----------------|
| Boric acid (H3BO3) | Repr. 1B |

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--------------------|-------------------------|---------------|---------------|--|--|
| Boric acid (H3BO3) | Rat TD _{Lo} | 52 mg/kg | 26 weeks | Paternal Effects Spermatogenesis (including genetic material, sperm morphology, motility, and count) | RTECS |

Inhalation (Dust/Mist) Exposure Route:

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--------------------|---------------------------|---------------|---------------|--|--|
| Boric acid (H3BO3) | Human TC _{Lo} | 0.010 mg/L | 10 years | Paternal Effects Epididymis Sperm duct Spermatogenesis (including genetic material, sperm morphology, motility, and count) testes | RTECS |

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. 11.2 Information on other hazards

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Based on available data, the classification criteria are not met.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Mixture

Acute aquatic toxicity: No data available.

Aquatic Chronic Toxicity: No data available.

Substance

Acute aquatic toxicity: Test data reported below.

Fish:

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|--------------------|---------------|----------------------------|------------------|---------------|--|
| Potassium chloride | 96 hours | <i>Pimephales promelas</i> | LC ₅₀ | 880 mg/L | IUCLID |
| Sodium hydroxide | 96 hours | <i>Oncorhynchus mykiss</i> | LC ₅₀ | 45.4 mg/L | IUCLID |

Crustacea:

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|------------------|---------------|--------------------|------------------|---------------|--|
| Sodium hydroxide | 48 Hours | <i>Daphnia sp.</i> | EC ₅₀ | 40.4 mg/L | IUCLID |

Aquatic Chronic Toxicity: No data available.

12.2. Persistence and degradability

Mixture No data available.

12.3. Bioaccumulative potential

Mixture: No data available.

Partition coefficient No data available

12.4. Mobility in soil

Soil Organic Carbon-Water Partition Coefficient No data available

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

| Chemical name | PBT and vPvB assessment |
|--------------------|---------------------------------|
| Boric acid (H3BO3) | The substance is not PBT / vPvB |
| Sodium hydroxide | The substance is not PBT / vPvB |

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

No information available.

Ozone: Not applicable

Ozone depletion potential (ODP): No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Advice on Disposal

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Our local agencies will accept used cuvettes to ensure their proper disposal.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste.

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste.

Contaminated packaging

Dispose of contents/containers in accordance with local regulations.

Other Information

Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

IMDG

14.1 UN number or ID number UN3316
 14.2 Proper shipping name Not regulated
 14.3 Transport hazard class(es) 9
 14.4 Packing Group Not regulated
 14.5 Marine pollutant Not applicable
 14.6 Special precautions for user 251, 340
 EmS-No F-A, S-P
 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable

ADR

14.1 UN number or ID number UN3316
 14.2 Proper shipping name CHEMICAL KIT
 14.3 Transport hazard class(es) 9
 Labels 9
 14.4 Packing Group II
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user 251, 340
 Classification code M11
 Tunnel restriction code (E)

IATA

| | |
|--|--------------------------------------|
| 14.1 UN number or ID number | UN3316 |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Transport hazard class(es) | 9 |
| 14.4 Packing group | II |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | See section 6-8 for more information |
| ERG Code | 9L |

Additional information

This product forms part of a kit. Information in this section relates to the kit as a whole.
If the item is not regulated, the Chemical Kit classification does not apply.

Section 15: REGULATORY INFORMATION

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

| Chemical name | Restricted substance per REACH Annex XVII | Substance subject to authorisation per REACH Annex XIV |
|---------------------------------|---|--|
| Boric acid (H3BO3) - 10043-35-3 | 30. 75. | |
| Sodium hydroxide - 1310-73-2 | 75. | |

Persistent Organic Pollutants Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

• Non-controlled

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Germany

Water hazard class (WGK) non-hazardous to water (nwg)

| Chemical name | French RG number | Title |
|----------------------------------|--|-------|
| Boric acid (H3BO3) 10043-35-3 | RG 5, RG 14, RG 15, RG 15bis, RG 20bis RG 20, RG 20bis, RG 26, RG 34, RG 65 | - |

International Inventories

| | |
|----------------------|----------|
| EINECS/ELINCS | Complies |
| TSCA | Complies |
| DSL/NDSL | Complies |
| ENCS | Complies |
| IECSC | Complies |

| | |
|--------------|----------|
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report Chemical safety assessments for substances in this mixture were not carried out.

Section 16: OTHER INFORMATION

| | |
|----------------------|----------------------------|
| Issue Date | 25-Dec-2005 |
| Revision Date | 13-Jul-2023 |
| Revision Note | updated SDS sections: 3 |

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

| | |
|----------|--|
| ** | Hazard Designation |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieure |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| CAS | Chemical Abstracts Service Number |
| Ceiling | Maximum limit value |
| CLP | Classification, Labelling and Packaging of substances and mixtures [Regulation (EC) No. 1272/2008] |
| DNEL | Derived No Effect Level (DNEL) |
| EC | European Community |
| ECHA | ECHA (The European Chemicals Agency) |
| EC50 | Effective Concentration to 50% of a test population |
| EEC | European Economic Community |
| EN | European Standard |
| IMDG | International Maritime Dangerous Goods (IMDG) |
| IATA | International Air Transport Association (IATA) |
| IATA-DGR | International Air Transport Association - Dangerous Goods Regulations |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | International Civil Aviation Organization - Technical Instructions |
| IUCLID | IUCLID (The International Uniform Chemical Information Database) |
| GHS | Globally Harmonized System of Classification and Labelling of Chemicals |
| LOAEL | Lowest observed adverse effect level |
| LOAEC | Lowest observed adverse effect concentration |
| LC50 | Lethal Concentration to 50% of a test population |
| LD50 | Lethal Dose to 50% of a test population (Median Lethal Dose) |
| LOLI | LOLI (List of Lists - An International Chemical Regulatory Database) |

| | |
|---------|---|
| MAK | Maximale Arbeitsplatz-Konzentration, a German expression corresponding to threshold limit value, which relates to safe daily exposure levels to chemical substances |
| NOAEL | NOAEL (No observed adverse effect level) |
| NOAEC | No observed adverse effect concentration |
| OSHA | OSHA (Occupational Safety and Health Administration of the US Department of Labour) |
| PEC | Predicted Effect Concentration |
| PNEC | Predicted No Effect Concentration (PNEC) |
| PBT | Persistent, Bioaccumulative, and Toxic (PBT) Chemicals |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals [Regulation (EC) No. 1907/2006] |
| RTECS | RTECS (Registry of Toxic Effects of Chemical Substances) |
| TWA | TWA (time-weighted average) |
| SKN* | Skin designation |
| SKN+ | Skin sensitisation |
| STEL | STEL (Short Term Exposure Limit) |
| STOT | Specific Target Organ Toxicity |
| STOT RE | Specific target organ toxicity — repeated exposure |
| STOT SE | Specific target organ toxicity — single exposure |
| SVHC | Substances of Very High Concern |
| TLV | Threshold Limit Value |
| TRGS | Technical rules for hazardous substances, Germany |
| TSCA | Toxic Substances Control Act |
| UN | United Nations |
| vPvB | very persistent and very bioaccumulative |
| VOC | Volatile organic compounds |
| AwSV | Administrative regulation of water polluting substances, Germany |

Key literature references and sources for data

See Section 11: TOXICOLOGICAL INFORMATION

See Section 12: ECOLOGICAL INFORMATION

Classification procedure

| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
|---|--------------------|
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - Vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Carcinogenicity | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration toxicity | Calculation method |
| Ozone | Calculation method |

Full text of H-Statements referred to under section 3

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H360FD - May damage fertility. May damage the unborn child

H290 - May be corrosive to metals

Training Advice

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 work

Restrictions on use

For Laboratory Use Only.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet