SAFETY DATA SHEET

according to Regulation (EU) 2015/830

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CLOCK CLEANING RINSE

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

**Product name** CLOCK CLEANING RINSE

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

Product Use [SU22] Professional uses: Public domain; [PC35] Washing and cleaning products (including solvent based products); [PROC10] Roller application or brushing; [PROC11] Non industrial spraying; [ERC8a] Wide dispersive indoor use of processing aids in open systems; [ERC8a] Wide dispersive outdoor use of processing aids in open systems;

**Description** SOLVENT BLEND.

**1.3. Details of the supplier of the safety data sheet**

**Company** H&P Storey

**Address** 19 Jericho Road (off Staple Road)

Balderton

Newark

Nottinghamshire

NG24 3GT

**Web** www.hpstorey.co.uk

**Telephone** 01636 676 381

**Fax**

**Email** charlotte@hpstorey.co.uk

**Email address of the competent person**

` [charlotte@hpstorey.co.uk](mailto:charlotte@hpstorey.co.uk)

**1.4. Emergency telephone number**

01636 676 381 9.00 am - 5.00 pm Mon – Fri

# SECTION 2: HAZARDS IDENTIFICATION

## 2.1. Classification of the substance or mixture

|  |  |
| --- | --- |
| **CLP Classification - Regulation (EC) No 1272/2008**  **Physical hazards** Flammable liquids | Category 3 (H226) |
| **Health hazards**  Aspiration Toxicity | Category 1 (H304) |
| Acute dermal toxicity | Category 4 (H312) |
| Acute Inhalation Toxicity - Vapors | Category 4 (H332) |
| Skin Corrosion/Irritation | Category 2 (H315) |
| Serious Eye Damage/Eye Irritation | Category 2 (H319) |
| Specific target organ toxicity - (single exposure) | Category 3 (H335) |
| Specific target organ toxicity - (repeated exposure) | Category 2 (H373) |
| **Environmental hazards**  Chronic aquatic toxicity | Category 3 (H412) |

*Full text of Hazard Statements: see section 16*

## 2.2. Label elements



**Signal Word Danger**

## Hazard Statements

H226 - Flammable liquid and vapor

H304 - May be fatal if swallowed and enters airways

H312 + H332 - Harmful in contact with skin or if inhaled

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H373 - May cause damage to organs through prolonged or repeated exposure H412 - Harmful to aquatic life with long lasting effects

## Precautionary Statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

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

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P310 - Immediately call a POISON CENTER or doctor/physician

### 2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB) Toxic to terrestrial vertebrates

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1. Substances

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Component** | **CAS-No** | **EC-No.** | | **Weight %** | **CLP Classification - Regulation (EC) No**  **1272/2008** |
| Xylenes (o-, m-, p- isomers) | 1330-20-7 | EEC No. 215-535-7 | | >95 | Flam. Liq. 3 (H226)  Asp. Tox. 1 (H304)  Acute Tox. 4 (H312)  Acute Tox. 4 (H332)  Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)  STOT SE 3 (H335)  STOT RE 2 (H373)  Aquatic Chronic 3 (H412) |
| **Reach Registration Number** | | 01-2119488216-32 | | | |
| **Isopropanol** | 67-63-0 · | 200-661-7 · | | <5 | Flam. Liq. 2 (H225)  Eye Irrit. 2 (H319)  STOT SE 3 (H336) |
| **Reach Registration Number** | | | 01-2119457558-25-XXXX | | | |
|  | | |  | | | |

*Full text of Hazard Statements: see section 16*

# SECTION 4: FIRST AID MEASURES

## 4.1. Description of first aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call

a physician or poison control center immediately. If vomiting occurs naturally, have victim lean forward.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. Risk of serious damage to the lungs (by aspiration).

**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

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

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

**Notes to Physician** Treat symptomatically. Symptoms may be delayed.

# SECTION 5: FIREFIGHTING MEASURES

**5.1. Extinguishing media**

## Suitable Extinguishing Media

Water spray. Alcohol resistant foam. Dry chemical. Carbon dioxide (CO 2). Water mist may be used to cool closed containers.

**Extinguishing media which must not be used for safety reasons** Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Special hazards arising from the substance or mixture

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

**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

Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges.

**6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system.

## 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment.

**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

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges.

## 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 away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry and well-ventilated place.

## Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) Class 3 (Germany)

**7.3. Specific end use(s)**

Use in laboratories

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1. Control parameters**

## Exposure limits

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Third edition. Published 2018. **IRE -** 2018 Code of Practice for the Chemical Agents Regulations, Schedule

1. Published by the Health and Safety Authority

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **The United Kingdom** | **European Union** | **Ireland** |
| Xylenes (o-, m-, p- isomers) | STEL: 100 ppm 15 min  STEL: 441 mg/m3 15 min  TWA: 50 ppm 8 hr  TWA: 220 mg/m3 8 hr Skin | TWA: 50 ppm (8h)  TWA: 221 mg/m3 (8h)  STEL: 100 ppm (15min)  STEL: 442 mg/m3 (15min) Skin | TWA: 50 ppm 8 hr.  TWA: 221 mg/m3 8 hr.  STEL: 100 ppm 15 min  STEL: 442 mg/m3 15 min Skin |

## Biological limit values

List source(s): **UK** - Biological Monitoring Guidance Values provided by the UK's Health and Safety Executive (HSE) Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended) and EH40/2005.

|  |  |  |
| --- | --- | --- |
| **Component** | **United Kingdom** | **European Union** |
| Xylenes (o-, m-, p- isomers) | Methyl hippuric acid: 650 mmol/mol creatinine urine post shift |  |

## 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.

MDHS70 General methods for sampling airborne gases and vapours

MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography

MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

## Derived No Effect Level (DNEL) See table for values

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Route of exposure** | **Acute effects (local)** | **Acute effects (systemic)** | **Chronic effects (local)** | **Chronic effects (systemic)** |
| **Oral Dermal** |  |  |  | 180 mg/kg bw/d |
| **Inhalation** | 289 mg/m3 | 289 mg/m3 |  | 77 mg/m3 |

**Predicted No Effect Concentration** See values below.

## (PNEC)

|  |  |
| --- | --- |
| **Fresh water** | 0.327 mg/l |
| **Fresh water sediment** | 12.46 mg/kg dw |
| **Marine water** | 0.327 mg/l |
| **Marine water sediment** | 12.46 mg/kg dw |
| **Water Intermittent** | 0.327 mg/l |
| **Microorganisms in sewage treatment** | 6.58 mg/l |
| **Soil (Agriculture)** | 2.31 mg/kg dw |

**8.2. Exposure controls**

## Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment.

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** |
| Viton (R) | See manufacturers recommendations | - | EN 374 | (minimum requirement) |

## Skin and body protection Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(Refer to manufacturer/supplier for information)

Ensure 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.

Remove 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 and maintained properly |
| **Large scale/emergency use** | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced  **Recommended Filter type:** Organic gases and vapours filter Type A Brown conforming to EN14387 |
| **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.  **Recommended half mask:-** Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141  When RPE is used a face piece Fit Test should be conducted |
| **Environmental exposure controls** | Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. |

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

## 9.1. Information on basic physical and chemical properties

|  |  |  |  |
| --- | --- | --- | --- |
| **Physical State** | Liquid |  | |
| **Appearance** | Colourless |  | |
| **Odor** | aromatic |  | |
| **Odor Threshold** | No data available |  | |
| **Melting Point/Range** | -34 °C / -29.2 °F |  | |
| **Softening Point** | No data available |  | |
| **Boiling Point/Range** | 136 - 140 °C / 276.8 - 284 °F | @ 760 mmHg | |
| **Flammability (liquid)** | Flammable | On basis of test data | |
| **Flammability (solid,gas)** | Not applicable | Liquid | |
| **Explosion Limits** | **Lower** 1% (V) **Upper** 7% (V) |  | |
| **Flash Point** | 30 °C | **Method -** No information available | |
| **Autoignition Temperature** | No data available |  | |
| **Decomposition Temperature** No data available  **pH** No information available  **Viscosity** No data available  **Water Solubility** Insoluble  **Solubility in other solvents** No information available  **Partition Coefficient (n-octanol/water)**  **Component log Pow**  Xylenes (o-, m-, p- isomers) 3.15  **Vapor Pressure** 8 mbar @ 20°C  **Density** / **Specific Gravity**  0.865  **Bulk Density** Not applicable  **Vapor Density** No data available  **Particle characteristics** Not applicable (liquid)  **9.2. Other information**  **Molecular Formula** C8 H10  **Molecular Weight** 106.17 | | Liquid  (Air = 1.0) |
| **Explosive Properties**  explosive air/vapour mixtures possible | | |

# SECTION 10: STABILITY AND REACTIVITY

|  |  |
| --- | --- |
| **10.1. Reactivity**  **10.2. Chemical stability** | None known, based on information available |

## Stable under normal conditions. 10.3. Possibility of hazardous reactions

|  |  |
| --- | --- |
| **Hazardous Polymerization** | No information available. |
| **Hazardous Reactions**  **10.4. Conditions to avoid**  **10.5. Incompatible materials** | None under normal processing.  Keep away from open flames, hot surfaces and sources of ignition. |

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**

## (a) acute toxicity;

**Oral** Based on available data, the classification criteria are not met

|  |  |  |  |
| --- | --- | --- | --- |
| **Dermal** | Category 4 |  |  |
| **Inhalation** | Category 4 |  |  |
| **Component** | **LD50 Oral** | **LD50 Dermal** | **LC50 Inhalation** |
| Xylenes (o-, m-, p- isomers) | LD50 = 3500 mg/kg ( Rat ) | LD50 > 4350 mg/kg ( Rabbit ) | 29.08 mg/L [MOE Risk  Assessment Vol.1, 2002] |

**(b) skin corrosion/irritation;** Category 2

## (c) serious eye damage/irritation; Category 2

|  |  |
| --- | --- |
| **(d) respiratory or skin sensitization;** | |
| **Respiratory** | Based on available data, the classification criteria are not met |
| **Skin** | Based on available data, the classification criteria are not met |
| **(e) germ cell mutagenicity;** | Based on available data, the classification criteria are not met |
| **(f) carcinogenicity;** | Based on available data, the classification criteria are not met  There are no known carcinogenic chemicals in this product |
| **(g) reproductive toxicity;** | Based on available data, the classification criteria are not met |
| **(h) STOT-single exposure;** | Category 3 |
| **Results / Target organs** | Respiratory system. |
| **(i) STOT-repeated exposure;** | Category 2 |
| **Target Organs** | No information available. |
| **(j) aspiration hazard;** | Category 1 |
| **Symptoms / effects,both acute and** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.  **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** The product contains following substances which are hazardous for the environment. Contains a substance which is:. Harmful to aquatic organisms.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component** | **Freshwater Fish** | **Water Flea** | | **Freshwater Algae** |
| Xylenes (o-, m-, p- isomers) | LC50: = 780 mg/L, 96h semi-static (Cyprinus carpio)  LC50: 23.53 - 29.97 mg/L, 96h static (Pimephales promelas) LC50: > 780 mg/L, 96h  (Cyprinus carpio)  LC50: 30.26 - 40.75 mg/L, 96h static (Poecilia reticulata)  LC50: 7.711 - 9.591 mg/L, 96h static (Lepomis macrochirus)  LC50: = 19 mg/L, 96h (Lepomis macrochirus) | LC50: = 0.6 mg/L, 48h  (Gammarus lacustris)  EC50: = 3.82 mg/L, 48h (water flea) | |  |
|  | LC50: 13.1 - 16.5 mg/L, 96h flow-through (Lepomis macrochirus)  LC50: 13.5 - 17.3 mg/L, 96h  (Oncorhynchus mykiss)  LC50: 2.661 - 4.093 mg/L, 96h static (Oncorhynchus mykiss)  LC50: = 13.4 mg/L, 96h flow-through (Pimephales  promelas) |  | |  |
| **Component** | **Microtox** | | **M-Factor** | | |
| Xylenes (o-, m-, p- isomers) | EC50 = 0.0084 mg/L 24 h | |  | | |

## 12.2. Persistence and degradability

**Persistence** Persistence is unlikely.

**Degradation in sewage** Contains substances known to be hazardous to the environment or not degradable in waste **treatment plant** water treatment plants.

## 12.3. Bioaccumulative potential Bioaccumulation is unlikely

|  |  |  |
| --- | --- | --- |
| **Component** | **log Pow** | **Bioconcentration factor (BCF)** |
| Xylenes (o-, m-, p- isomers) | 3.15 | 0.6 - 15 |
| **12.4. Mobility in soil** | Spillage unlikely to penetrate soil. The product is insoluble and floats on water. Is not likely mobile in the environment due its low water solubility. | |
| **12.5. Results of PBT and vPvB assessment** | Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (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**  **Persistent Organic Pollutant** | This product does not contain any known or suspected substance | |
| **Ozone Depletion Potential** | This product does not contain any known or suspected substance | |
| **SECTION 13: DISPOSAL CONSIDERATIONS** | | |
| **13.1. Waste treatment methods**  **Waste from Residues/Unused**  **Products** | 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 this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition. | |
| **European Waste Catalogue (EWC)** | According to the European Waste Catalog, Waste Codes are not product specific, but application specific. | |
| **Other Information** | Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Can be landfilled or incinerated, when in compliance with local regulations. Do not let this chemical enter the environment. Do not empty into drains. | |
| **SECTION 14: TRANSPORT INFORMATION** | | |

## IMDG/IMO

|  |  |
| --- | --- |
| **14.1. UN number** | UN1307 |
| **14.2. UN proper shipping name** | XYLENES |
| **14.3. Transport hazard class(es)** | 3 |
| **14.4. Packing group**  **ADR** | III |
| **14.1. UN number** | UN1307 |
| **14.2. UN proper shipping name** | XYLENES |
| **14.3. Transport hazard class(es)** | 3 |
| **14.4. Packing group**  **IATA** | III |
| **14.1. UN number** | UN1307 |
| **14.2. UN proper shipping name** | XYLENES |
| **14.3. Transport hazard class(es)** | 3 |
| **14.4. Packing group** | III |
| **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

X = listed, Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), China (IECSC), Japan (ENCS), Australia (AICS), Korea (ECL).

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Component** | **EINECS** | **ELINCS** | **NLP** | **TSCA** | **DSL** | **NDSL** | **PICCS** | **ENCS** | **IECSC** | **AICS** | **KECL** |
| Xylenes (o-, m-, p- isomers) | 215-535-7 | - |  | X | X | - | X | X | X | X | KE-3542 7 |

**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

## National Regulations

**WGK Classification** See table for values

|  |  |  |
| --- | --- | --- |
| **Component** | **Germany - Water Classification (VwVwS)** | **Germany - TA-Luft Class** |
| Xylenes (o-, m-, p- isomers) | WGK2 |  |
|  |  | |
| **Component** | **France - INRS (Tables of occupational diseases)** | |
| Xylenes (o-, m-, p- isomers) | Tableaux des maladies professionnelles (TMP) - RG 4bis,RG 84 | |

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

**15.2. Chemical safety assessment**

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

# SECTION 16: OTHER INFORMATION

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

H226 - Flammable liquid and vapor

H304 - May be fatal if swallowed and enters airways

H312 - Harmful in contact with skin

H332 - Harmful if inhaled

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H373 - May cause damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

**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 | **ENCS** - Japanese Existing and New Chemical Substances |
| **IECSC** - Chinese Inventory of Existing 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 | **TWA** - Time Weighted Average |
| **ACGIH** - American Conference of Governmental Industrial Hygienists | **IARC** - International Agency for Research on Cancer |
| **DNEL** - Derived No Effect Level | Predicted No Effect Concentration (PNEC) |
| **RPE** - Respiratory Protective Equipment | **LD50** - Lethal Dose 50% |
| **LC50** - Lethal Concentration 50% | **EC50** - Effective Concentration 50% |
| **NOEC** - No Observed Effect Concentration | **POW** - Partition coefficient Octanol:Water |
| **PBT** - Persistent, Bioaccumulative, Toxic | **vPvB** - very Persistent, very Bioaccumulative |
| **ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road | **ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association |
| **IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code | **MARPOL** - International Convention for the Prevention of Pollution from Ships |
| **OECD** - Organisation for Economic Co-operation and Development | **ATE** - Acute Toxicity Estimate |
| **BCF** - Bioconcentration factor | 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

### Training Advice

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

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Chemical incident response training.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

|  |  |
| --- | --- |
| **Creation Date** | 31-May-2018 |
| **Revision Date** | 17-Dec-2020 |
| **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**

**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