

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 28-Apr-2009

Revision Date 29-Sep-2023

Revision Number 14

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

1.1. Product identifier

| Product Description: | Acetone_ |
|---------------------------|---------------------------------|
| Cat No. : | 326700000; 326700010; 326700025 |
| Synonyms | 2-Propanone |
| Index No | 606-001-00-8 |
| CAS No | 67-64-1 |
| EC No | 200-662-2 |
| Molecular Formula | C3 H6 O |
| REACH registration number | 01-2119471330-49 |

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

| Sector of useSProduct categoryPProcess categoriesP | aboratory chemicals. SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites PC21 - Laboratory chemicals PROC15 - Use as a laboratory reagent Io Information available |
|--|---|
|--|---|

1.3. Details of the supplier of the safety data sheet

| Company | UK entity/business name Fisher Scientific UK Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, United Kingdom |
|---------------------------------|---|
| | EU entity/business name Thermo Fisher Scientific Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium |
| E-mail address | begel.sdsdesk@thermofisher.com |
| 1.4. Emergency telephone number | For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11 Emergency Number US: 001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No. US: 001-800-424-9300 / Europe: 001-703-527-3887 |

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

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Flammable liquids

Acetone

Health hazards

Serious Eye Damage/Eye Irritation Specific target organ toxicity - (single exposure)

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

Danger

Hazard Statements

H225 - Highly flammable liquid and vapor H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness EUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary Statements

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

P280 - Wear eye protection/ face protection

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 person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

P337 + P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

| Component | CAS No | EC No | Weight % | CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|-----------|---------|-----------|----------|---|
| Acetone | 67-64-1 | 200-662-2 | >95 | Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336) |

Category 2 (H225)

Category 2 (H319) Category 3 (H336)

Revision Date 29-Sep-2023

Acetone

| REACH registration number | 01-2119471330-49 |
|---------------------------|------------------|

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. | | | |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. | | | |
| Self-Protection of the First Aider | Remove all sources of ignition. Use personal protective equipment as required. | | | |
| 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: May cause pulmonary edema | | | |
| 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, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons Do not use water jetstream.

5.2. Special hazards arising from the substance or mixture

Flammable. Risk of ignition. 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

Carbon monoxide (CO), Carbon dioxide (CO₂), Formaldehyde, Methanol.

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

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

6.2. Environmental precautions

Should not be released into the environment.

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. 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

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. 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

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

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

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, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations,

Acetone

Schedule 1. Published by the Health and Safety Authority

| Component | The United Kingdom | European Union | Ireland |
|-----------|------------------------------|----------------------------------|-------------------------------------|
| Acetone | TWA: 500 ppm | TWA: 500 ppm (8h) | TWA: 500 ppm 8 hr. |
| | TWA: 1210 mg/m ³ | TWA: 1210 mg/m ³ (8h) | TWA: 1210 mg/m ³ 8 hr. |
| | STEL: 1500 ppm | | STEL: 1500 ppm 15 min |
| | STEL: 3620 mg/m ³ | | STEL: 3630 mg/m ³ 15 min |

Biological limit values

List source(s):

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) |
|-------------------------|---------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| Acetone 67-64-1(>95) | | | | DNEL = 186mg/kg bw/day |

| Component | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|----------------------------|-------------------------------------|--|---------------------------------------|---------------------------------------|
| Acetone 67-64-1 (>95) | DNEL = 2420mg/m ³ | | | DNEL = 1210mg/m ³ |

Predicted No Effect Concentration (PNEC)

See values below.

| Component | Fresh water | Fresh water | Water Intermittent | Microorganisms in | Soil (Agriculture) |
|---------------|-----------------|------------------|--------------------|-------------------|--------------------|
| | | sediment | | sewage treatment | |
| Acetone | PNEC = 10.6mg/L | PNEC = 30.4mg/kg | PNEC = 21mg/L | PNEC = 100mg/L | PNEC = 29.5mg/kg |
| 67-64-1 (>95) | | sediment dw | - | - | soil dw |

| Component | Marine water | Marine water sediment | Marine water intermittent | Food chain | Air |
|---------------|-----------------|--------------------------|------------------------------|------------|-----|
| Acetone | PNEC = 1.06mg/L | PNEC = 3.04mg/kg | | | |
| 67-64-1 (>95) | | sediment dw | | | |

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. 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 standar | d - EN 166) | |
|--------------------------------|------------------------------------|---------------------------|-------------------------------|---|
| Hand Protection | Protectiv | ve gloves | | |
| Glove material Butyl rubber | Breakthrough time > 480 minutes | Glove thickness 0.5 mm | EU standard EN 374 Level 6 | Glove comments As tested under EN374-3 Determination of Resistance to Permeation by Chemicals |
| Neoprene gloves | < 30 minutes | 0.45 mm | | |
| Skin and body prot | ection Long sle | eved 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: low boiling organic solvent Type AX Brown conforming to EN371 |
| 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 Do not allow material to contaminate ground water system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Physical State | Liquid | |
|--------------------------------------|--------------------------|--------------------------|
| Appearance | Colorless | |
| Odor | sweet | |
| Odor Threshold | 19.8 ppm | |
| Melting Point/Range | -95 °C / -139 °F | |
| Softening Point | No data available | |
| Boiling Point/Range | 56 °C / 132.8 °F | |
| Flammability (liquid) | Highly flammable | On basis of test data |
| Flammability (solid,gas) | Not applicable | Liquid |
| Explosion Limits | Lower 2.1 vol% | |
| | Upper 13 vol% | |
| Flash Point | -20 °C / -4 °F | Method - CC (closed cup) |
| Autoignition Temperature | 465 °C / 869 °F | |
| Decomposition Temperature | > 4°C | |
| рН | 7 | |
| Viscosity | 0.32 mPa.s @ 20 °C | |
| Water Solubility | Soluble | |
| Solubility in other solvents | No information available | |
| Partition Coefficient (n-octanol/wat | er) | |
| Component | log Pow | |
| Acetone | -0.24 | |
| Vapor Pressure | 247 mbar @ 20 °C | |
| Density / Specific Gravity | 0.790 | |
| Bulk Density | Not applicable | Liquid |
| Vapor Density | 2.0 | (Air = 1.0) |
| Particle characteristics | Not applicable (liquid) | |
| | | |

9.2. Other information

Acetone

Molecular Formula Molecular Weight VOC Content(%) Explosive Properties Oxidizing Properties Evaporation Rate Refractive index C3 H6 O 58.08 100 Not explosive Vapors may form explosive mixtures with air Not oxidising 5.6 (Butyl Acetate = 1.0) 1.358 - 1.359

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

| Hazardous Polymerization Hazardous Reactions | Hazardous polymerization does not occur. None under normal processing. |
|---|---|
| 10.4. Conditions to avoid | Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition. |
| 10.5. Incompatible materials | Strong oxidizing agents. Strong reducing agents. Strong bases. Peroxides. Halogenated compounds. Alkali metals. Amines. |

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO₂). Formaldehyde. Methanol.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product 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

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------|------------------|------------------------|---------------------|
| Acetone | 5800 mg/kg (Rat) | > 15800 mg/kg (rabbit) | 76 mg/l, 4 h, (rat) |
| | | > 7400 mg/kg (rat) | |

(b) skin corrosion/irritation;

Based on available data, the classification criteria are not met

| (c) serious eye damage/irritation; | Category 2 |
|------------------------------------|--------------------|
| Test method | OECD 405 |
| Test species | rabbit |
| Observation end point | Irritating to eyes |

Acetone

(d) respiratory or skin sensitization;

Respiratory Skin Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met

| Component | Test method | Test species | Study result |
|--------------|------------------------------|--------------|-----------------|
| Acetone | Guinea Pig Maximisation Test | guinea pig | non-sensitising |
| 67-64-1(>95) | (GPMT) | | |

(e) germ cell mutagenicity;

Based on available data, the classification criteria are not met

| Component | Test method | Test species | Study result |
|--|--|----------------------------------|------------------------------|
| Acetone 67-64-1 (>95) | OECD Test Guideline 471 AMES test | in vivo | negative |
| | OECD Test Guideline 476 Mammalian Gene cell mutation | in vitro | negative |
| (f) carcinogenicity; | Based on available data, the cla | ssification criteria are not met | |
| | There are no known carcinogen | ic chemicals in this product | |
| (g) reproductive toxicity; | Based on available data, the cla | ssification criteria are not met | |
| (h) STOT-single exposure; | Category 3 | | |
| Results / Target organs | Central nervous system (CNS). | | |
| (i) STOT-repeated exposure; | Based on available data, the cla | ssification criteria are not met | |
| Test method Test species / Duration Study result Route of exposure Target Organs | OECD Test No. 408 Rat / 90 days NOAEL = 900 mg/kg Oral None known. | | |
| (j) aspiration hazard; | Based on available data, the cla | ssification criteria are not met | |
| Symptoms / effects,both acute and delayed | Symptoms of overexposure may May cause pulmonary edema. | v be headache, dizziness, tiredr | ness, nausea and vomiting. |
| 11.2. Information on other hazards | | | |
| Endocrine Disrupting Properties | Assess endocrine disrupting pro known or suspected endocrine of | | product does not contain any |

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity Ecotoxicity effects

| Component | Freshwater Fish | Water Flea | Freshwater Algae |
|-----------|---|--|-------------------------------|
| Acetone | Oncorhynchus mykiss: LC50 = 5540 mg/l 96h Alburnus alburnus: LC50 = 11000 mg/l 96h Leuciscus idus: LC50 = 11300 | EC50 = 8800 mg/L/48h EC50 = 12700 mg/L/48h EC50 = 12600 mg/L/48h | NOEC = 430 mg/l (algae; 96 h) |

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Acetone

| mg/L/48h Salmo gairdneri: LC50 = 610 mg/L/24h | | |
|---|--|--|
|---|--|--|

| Component | Microtox | M-Factor |
|-----------|--------------------------|----------|
| Acetone | EC50 = 14500 mg/L/15 min | |

12.2. Persistence and degradability Readily biodegradable

Persistence Persistence is unlikely, based on information available.

| Component | Degradability |
|----------------|--------------------------|
| Acetone | 91 % (28 d) (OECD 301 B) |
| 67-64-1 (>95) | |

12.3. Bioaccumulative potential Bioaccumulation is unlikely

| Component | log Pow | Bioconcentration factor (BCF) |
|--|--|-------------------------------|
| Acetone | -0.24 | 0.69 dimensionless |
| <u>12.4. Mobility in soil</u> | The product contains volatile organic compour surfaces Will likely be mobile in the environme air | |
| <u>12.5. Results of PBT and vPvB</u> assessment | Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB). | |
| <u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information | This product does not contain any known or su | uspected endocrine disruptors |
| | | |

12.7. Other adverse effectsPersistent Organic PollutantOzone Depletion PotentialThis product does not contain any known or suspected substanceThis 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 | Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with local regulations. |

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> 14.4. Packing group | UN1090 ACETONE 3 II |
|--|----------------------------------|
| ADR | |
| <u>14.1. UN number</u> 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group | UN1090 ACETONE 3 II |
| IATA | |
| <u>14.1. UN number</u> 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group | UN1090 ACETONE 3 II |
| 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 |
|-----------|---------|-----------|--------------------------------|-----|-------|------|----------|-------|-------|
| Acetone | 67-64-1 | 200-662-2 | - | - | Х | Х | KE-29367 | Х | Х |
| | | | | | | | | | |
| Component | CAS No | TSCA | TSCA In notific Active-l | | DSL | NDSL | AICS | NZIoC | PICCS |
| Acetone | 67-64-1 | X | ACT | IVE | X | - | X | X | X |

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 | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|-----------|---------|---|--|---|
| Acetone | 67-64-1 | - | Use restricted. See item 75. (see link for restriction details) | - |

REACH links

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

Seveso III Directive (2012/18/EC)

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report |
|-----------|---------|---|--|
| | | Notification | Requirements |
| Acetone | 67-64-1 | 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

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

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 .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

National Regulations

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

WGK Classification

See table for values

| Component | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|-----------|---------------------------------------|-------------------------|
| Acetone | WGK1 | |

| Component | France - INRS (Tables of occupational diseases) |
|-----------|--|
| Acetone | Tableaux des maladies professionnelles (TMP) - RG 84 |

| 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 |
|-------------------------|--|---|--|
| Acetone 67-64-1(>95) | | Group I | |

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has been conducted by the manufacturer/importer

SECTION 16: OTHER INFORMATION

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

H225 - Highly flammable liquid and vapor

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

EUH066 - Repeated exposure may cause skin dryness or cracking

Legend

| CAS - Chemical Abstracts Service | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory |
|---|--|
| EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances | |
| 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 |
| 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 Key literature references and sources for data https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, F | 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) |

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

| Creation Date | 28-Apr-2009 |
|------------------|-----------------|
| Revision Date | 29-Sep-2023 |
| Revision Summary | Not applicable. |

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

Disclaimer

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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