# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**Creation Date** 28-Nov-2019 **Revision Date** 17-Jun-2025 **Revision Number** 1

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

### 1.1. Product identifier

**Product Description:** 10% Acetonitrile, 90% Water
**Cat No. :** TS/0802/15

### 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**

**EU entity/business name**
Thermo Fisher Scientific
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium

**UK entity/business name**
Fisher Scientific UK
Bishop Meadow Road, Loughborough,
Leicestershire LE11 5RG, United Kingdom

**Swiss distributor -** Fisher Scientific AG
Neuhofstrasse 11, CH 4153 Reinach
Tel: +41 (0) 56 618 41 11
e-mail - infoch@thermofisher.com

**E-mail address** begel.sdsdesk@thermofisher.com

### 1.4. Emergency telephone number

Tel: 01509 231166
Chemtrec US: (800) 424-9300
Chemtrec EU: 001-703-527-3887

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**

Flammable liquids — Category 2 (H225)

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

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

*Full text of Hazard Statements: see section 16*

### 2.2. Label elements

Contains Acetonitrile

**Signal Word** **Danger**

**Hazard Statements**
H225 - Highly flammable liquid and vapor

**Precautionary Statements**
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P501 - Dispose of contents/container to industrial incineration plant

### 2.3. Other hazards

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)
This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

This product does not contain any known or suspected endocrine disruptors

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

| Component | CAS No | EC No | Weight % | CLP Classification - Regulation (EC) No 1272/2008 |
|---|---|---|---|---|
| Acetonitrile | 75-05-8 | 200-835-2 | 5 - 10 | Flam. Liq. 2 (H225)<br>Acute Tox. 4 (H302)<br>Acute Tox. 4 (H312)<br>Eye Irrit. 2 (H319) |

| | | | | |
|---|---|---|---|---|
| | | | | Acute Tox. 4 (H332) |
| Water | 7732-18-5 | 231-791-2 | 90 - 95 | - |

| Component | ECHA (RAC) ATE (Oral) | ECHA (RAC) ATE (Dermal) | ECHA (RAC) ATE (Inhalation) |
|---|---|---|---|
| Acetonitrile | ATE = 617 mg/kg | - | - |

| Components | Reach Registration Number | |
|---|---|---|
| Acetonitrile | 01-2119471307-38 | |

*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** 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.

## Section 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable Extinguishing Media**
Water mist may be used to cool closed containers.

**Extinguishing media which must not be used for safety reasons**
No information available.

### 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**

Nitrogen oxides (NOx), Hydrogen cyanide (hydrocyanic acid).

### 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

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

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. 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. Keep container tightly closed in a dry and well-ventilated place.

| | |
|---|---|
| **Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany)** | Class 3 |
| **Switzerland - Storage of hazardous substances** | Storage class - SC 3<br>https://www.kvu.ch/de/themen/stoffe-und-produkte<br>https://www.kvu.ch/fr/themes/substances-et-produits<br>https://www.kvu.ch/it/temi/sostanze-e-prodotti |

### 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, Forth edition. Published 2020. **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 Arbeitsplatz) 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 |
|---|---|---|---|---|---|
| Acetonitrile | TWA: 40 ppm (8hr)<br>TWA: 70 mg/m³ (8hr)<br>Skin | STEL: 60 ppm 15 min<br>STEL: 102 mg/m³ 15 min<br>TWA: 40 ppm 8 hr<br>TWA: 68 mg/m³ 8 hr | TWA / VME: 40 ppm (8 heures). restrictive limit<br>TWA / VME: 70 mg/m³ (8 heures). restrictive limit TWA / VME: 5 mg/m³ (8 heures).<br>Peau | TWA: 20 ppm 8 uren<br>TWA: 34 mg/m³ 8 uren<br>Huid | TWA / VLA-ED: 40 ppm (8 horas)<br>TWA / VLA-ED: 68 mg/m³ (8 horas)<br>Piel |

| Component | Italy | Germany | Portugal | The Netherlands | Finland |
|---|---|---|---|---|---|
| Acetonitrile | TWA: 20 ppm 8 ore. Time Weighted Average<br>TWA: 35 mg/m³ 8 ore. Time Weighted Average<br>Pelle | TWA: 10 ppm (8 Stunden). AGW - exposure factor 2<br>TWA: 17 mg/m³ (8 Stunden). AGW - exposure factor 2<br>TWA: 10 ppm (8 Stunden). MAK<br>TWA: 17 mg/m³ (8 Stunden). MAK TWA: 2 mg/m³ (8 Stunden). MAK<br>Höhepunkt: 20 ppm<br>Höhepunkt: 34 mg/m³<br>Höhepunkt: 2 mg/m³<br>Haut | TWA: 40 ppm 8 horas<br>TWA: 70 mg/m³ 8 horas<br>Pele | TWA: 20 ppm 8 uren<br>TWA: 34 mg/m³ 8 uren | TWA: 20 ppm 8 tunteina<br>TWA: 34 mg/m³ 8 tunteina<br>STEL: 40 ppm 15 minuutteina<br>STEL: 68 mg/m³ 15 minuutteina<br>Iho |

| Component | Austria | Denmark | Switzerland | Poland | Norway |
|---|---|---|---|---|---|
| Acetonitrile | Haut<br>MAK-KZGW: 160 ppm 15 Minuten<br>MAK-KZGW: 280 mg/m³ 15 Minuten<br>MAK-TMW: 40 ppm 8 Stunden<br>MAK-TMW: 70 mg/m³ 8 Stunden | TWA: 40 ppm 8 timer<br>TWA: 70 mg/m³ 8 timer<br>STEL: 80 ppm 15 minutter<br>STEL: 140 mg/m³ 15 minutter<br>Hud | Haut/Peau<br>STEL: 40 ppm 15 Minuten<br>STEL: 68 mg/m³ 15 Minuten<br>TWA: 20 ppm 8 Stunden<br>TWA: 34 mg/m³ 8 Stunden | STEL: 140 mg/m³ 15 minutach<br>TWA: 70 mg/m³ 8 godzinach | TWA: 30 ppm 8 timer<br>TWA: 50 mg/m³ 8 timer<br>TWA: 5 mg/m³ 8 timer<br>STEL: 45 ppm 15 minutter. value calculated<br>STEL: 75 mg/m³ 15 minutter. value calculated<br>Hud |

| Component | Bulgaria | Croatia | Ireland | Cyprus | Czech Republic |
|---|---|---|---|---|---|
| Acetonitrile | TWA: 40 ppm<br>TWA: 70 mg/m³<br>Skin notation | kože<br>TWA-GVI: 40 ppm 8 satima.<br>TWA-GVI: 70 mg/m³ 8 satima. | TWA: 40 ppm 8 hr.<br>TWA: 70 mg/m³ 8 hr.<br>STEL: 120 ppm 15 min<br>STEL: 310 mg/m³ 15 min<br>Skin | TWA: 40 ppm<br>TWA: 70 mg/m³ | TWA: 70 mg/m³ 8 hodinách.<br>Potential for cutaneous absorption<br>Ceiling: 100 mg/m³ |

| Component | Estonia | Gibraltar | Greece | Hungary | Iceland |
|---|---|---|---|---|---|
| Acetonitrile | Nahk<br>TWA: 40 ppm 8 tundides.<br>TWA: 70 mg/m³ 8 tundides. | Skin notation<br>TWA: 40 ppm 8 hr<br>TWA: 70 mg/m³ 8 hr | STEL: 60 ppm<br>STEL: 105 mg/m³<br>TWA: 40 ppm<br>TWA: 70 mg/m³ | TWA: 40 ppm 8 órában. AK<br>TWA: 70 mg/m³ 8 órában. AK lehetséges borön keresztüli felszívódás | TWA: 40 ppm 8 klukkustundum.<br>TWA: 70 mg/m³ 8 klukkustundum.<br>Skin notation<br>Ceiling: 80 ppm<br>Ceiling: 140 mg/m³ |

| Component | Latvia | Lithuania | Luxembourg | Malta | Romania |
|---|---|---|---|---|---|
| Acetonitrile | skin - potential for cutaneous exposure<br>TWA: 40 ppm<br>TWA: 70 mg/m³ | TWA: 40 ppm IPRD<br>TWA: 70 mg/m³ IPRD<br>Oda | Possibility of significant uptake through the skin<br>TWA: 40 ppm 8 Stunden<br>TWA: 70 mg/m³ 8 Stunden | possibility of significant uptake through the skin<br>TWA: 40 ppm<br>TWA: 70 mg/m³ | Skin notation<br>TWA: 40 ppm 8 ore<br>TWA: 70 mg/m³ 8 ore |

| Component | Russia | Slovak Republic | Slovenia | Sweden | Turkey |
|---|---|---|---|---|---|
| Acetonitrile | MAC: 10 mg/m³ | Potential for cutaneous absorption<br>TWA: 40 ppm<br>TWA: 70 mg/m³ | TWA: 40 ppm 8 urah<br>TWA: 70 mg/m³ 8 urah<br>Koža<br>STEL: 140 mg/m³ 15 minutah<br>STEL: 80 ppm 15 minutah | Indicative STEL: 60 ppm 15 minuter<br>Indicative STEL: 100 mg/m³ 15 minuter<br>TLV: 30 ppm 8 timmar. NGV<br>TLV: 50 mg/m³ 8 timmar. NGV<br>Hud | Deri<br>TWA: 40 ppm 8 saat<br>TWA: 70 mg/m³ 8 saat |

**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.
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) / 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) |
|---|---|---|---|---|
| Acetonitrile<br>75-05-8 ( 5 - 10 ) | | | | DNEL = 32.2mg/kg bw/day |

| Component | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|---|---|---|---|---|
| Acetonitrile<br>75-05-8 ( 5 - 10 ) | DNEL = 40.6 ppm<br>(68 mg/m³) | DNEL = 40.6 ppm<br>(68 mg/m³) | DNEL = 40.6 ppm<br>(68 mg/m³) | DNEL = 40.6 ppm<br>(68 mg/m³) |

**Predicted No Effect Concentration (PNEC)**
See values below.

| Component | Fresh water | Fresh water sediment | Water Intermittent | Microorganisms in sewage treatment | Soil (Agriculture) |
|---|---|---|---|---|---|
| Acetonitrile<br>75-05-8 ( 5 - 10 ) | PNEC = 10mg/L | PNEC = 7.53mg/kg sediment dw | PNEC = 10mg/L | PNEC = 32mg/L | PNEC = 2.41mg/kg soil dw |

| Component | Marine water | Marine water | Marine water | Food chain | Air |
|---|---|---|---|---|---|

| | | sediment | Intermittent | | |
|---|---|---|---|---|---|
| Acetonitrile<br>75-05-8 ( 5 - 10 ) | PNEC = 1mg/L | | | | |

**8.2. Exposure controls**

**Engineering Measures**
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** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

**Hand Protection** Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments |
|---|---|---|---|---|
| Natural rubber<br>Nitrile rubber<br>Neoprene<br>PVC | See manufacturers recommendations | - | EN 374 | (minimum requirement) |

**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 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:** Particulates filter conforming to EN 143

**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:-** Particle filtering: EN149:2001
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** | Liquid | |
| **Appearance** | Colorless | |
| **Odor** | No information available | |
| **Odor Threshold** | No data available | |
| **Melting Point/Range** | No data available | |
| **Softening Point** | No data available | |
| **Boiling Point/Range** | No information available | |
| **Flammability (liquid)** | Flammable | On basis of test data |
| **Flammability (solid,gas)** | Not applicable | Liquid |
| **Explosion Limits** | No data available | |

| | | |
|---|---|---|
| **Flash Point** | < 23 °C / < 73.4 °F | **Method -** Based on available literature |
| **Autoignition Temperature** | No data available | |
| **Decomposition Temperature** | No data available | |
| **pH** | No information available | |
| **Viscosity** | No data available | |
| **Water Solubility** | No information available | |
| **Solubility in other solvents** | No information available | |
| **Partition Coefficient (n-octanol/water)** | | |
| **Component** | **log Pow** | |
| Acetonitrile | -0.34 | |
| **Vapor Pressure** | No data available | |
| **Density / Specific Gravity** | 0.978 | |
| **Bulk Density** | Not applicable | Liquid |
| **Vapor Density** | No data available | (Air = 1.0) |
| **Particle characteristics** | Not applicable (liquid) | |

**9.2. Other information**

**Explosive Properties** explosive air/vapour mixtures possible

## 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** No information available.
**Hazardous Reactions** None under normal processing.

**10.4. Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

Nitrogen oxides (NOx). Hydrogen cyanide (hydrocyanic acid).

## 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 ATE data, the classification criteria are not met<br>ATE = 7713 mg/kg |
| **Dermal** | Based on ATE data, the classification criteria are not met<br>ATE = 13750 mg/kg |
| **Inhalation** | Based on ATE data, the classification criteria are not met<br>ATE = 137.5 mg/l |

**Toxicology data for the components**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Acetonitrile | 450-787 mg/kg (Rat)<br>2460 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | LC50 = 3587 ppm (6.022 mg/l) (Mouse) 4h<br>LC50 = 16,000 ppm (26.8 mg/l) (Rat) 4h |
| Water | - | - | - |

| Component | ECHA (RAC) ATE (Oral) | ECHA (RAC) ATE (Dermal) | ECHA (RAC) ATE (Inhalation) |
|---|---|---|---|
| Acetonitrile | ATE = 617 mg/kg | - | - |

**(b) skin corrosion/irritation;** Based on available data, the classification criteria are not met

**(c) serious eye damage/irritation;** Based on available data, the classification criteria are not met

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

**(i) STOT-repeated exposure;** Based on available data, the classification criteria are not met

**Target Organs** No information available.

**(j) aspiration hazard;** Based on available data, the classification criteria are not met

**Symptoms / effects,both acute and delayed** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**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 | Freshwater Fish | Water Flea | Freshwater Algae |
|---|---|---|---|
| Acetonitrile | LC50: = 1850 mg/L, 96h static (Lepomis macrochirus)<br>LC50: = 1000 mg/L, 96h static | | |

| | | | |
|---|---|---|---|
| | (Pimephales promelas)<br>LC50: 1600 - 1690 mg/L, 96h flow-through (Pimephales promelas)<br>LC50: = 1650 mg/L, 96h static (Poecilia reticulata) | | |

| Component | Microtox | M-Factor |
|---|---|---|
| Acetonitrile | EC50 = 28000 mg/L 48 h<br>EC50 = 73 mg/L 24 h<br>EC50 = 7500 mg/L 15 h | |

**12.2. Persistence and degradability**

**Persistence** Persistence is unlikely.

**12.3. Bioaccumulative potential** Bioaccumulation is unlikely

| Component | log Pow | Bioconcentration factor (BCF) |
|---|---|---|
| Acetonitrile | -0.34 | No data available |

**12.4. Mobility in soil** The product is water soluble, and may spread in water systems

**12.5. Results of PBT and vPvB assessment** This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (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** 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.

**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**

| | |
|---|---|
| **14.1. UN number** | UN1648 |
| **14.2. UN proper shipping name** | ACETONITRILE SOLUTION |
| **14.3. Transport hazard class(es)** | 3 |
| **14.4. Packing group** | II |

**ADR**

| | |
|---|---|
| **14.1. UN number** | UN1648 |
| **14.2. UN proper shipping name** | ACETONITRILE SOLUTION |
| **14.3. Transport hazard class(es)** | 3 |
| **14.4. Packing group** | II |

**IATA**

| | |
|---|---|
| **14.1. UN number** | UN1648 |
| **14.2. UN proper shipping name** | ACETONITRILE SOLUTION |
| **14.3. Transport hazard class(es)** | 3 |
| **14.4. Packing group** | 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**

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No | EINECS | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
|---|---|---|---|---|---|---|---|---|---|
| Acetonitrile | 75-05-8 | 200-835-2 | - | - | X | X | KE-00067 | X | X |
| Water | 7732-18-5 | 231-791-2 | - | - | X | X | KE-35400 | X | - |

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|---|---|---|---|---|---|---|---|---|
| Acetonitrile | 75-05-8 | X | ACTIVE | X | - | X | X | X |
| Water | 7732-18-5 | X | ACTIVE | 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 (1907/2006) - Annex XVII - Restrictions on Certain Dangerous | REACH Regulation (EC 1907/2006) article 59 - Candidate List of |
|---|---|---|---|---|

| | | | Substances | Substances of Very High Concern (SVHC) |
|---|---|---|---|---|
| Acetonitrile | 75-05-8 | - | Use restricted. See entry 75. (see link for restriction details) | - |
| Water | 7732-18-5 | - | - | - |

**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 Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|---|---|---|---|
| Acetonitrile | 75-05-8 | Not applicable | Not applicable |
| Water | 7732-18-5 | 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** Water endangering class = 2 (self classification)

| Component | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|---|---|---|
| Acetonitrile | WGK2 | |

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

**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.

**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**
H225 - Highly flammable liquid and vapor
H302 - Harmful if swallowed

H312 - Harmful in contact with skin
H319 - Causes serious eye irritation
H332 - Harmful if inhaled

**Legend**

**CAS** - Chemical Abstracts Service
**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
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**ENCS** - Japanese Existing and New Chemical Substances
**AICS** - Australian Inventory of 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

**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** | On basis of test data |
| **Health Hazards** | Calculation method |
| **Environmental hazards** | Calculation method |

**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.

| | |
|---|---|
| **Creation Date** | 28-Nov-2019 |
| **Revision Date** | 17-Jun-2025 |
| **Revision Summary** | SDS sections updated, 2, 9, 14. |

**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**

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## End of Safety Data Sheet