

Creation Date 16-Jun-2009

Revision Date 29-Sep-2023

Revision Number 10

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

### 1.1. Product identifier

|                                  |                                        |
|----------------------------------|----------------------------------------|
| <b>Product Description:</b>      | <b>Acetonitrile</b>                    |
| <b>Cat No. :</b>                 | <b>326680000; 326680010; 326680025</b> |
| <b>Synonyms</b>                  | AN; Methyl cyanide; Ethanenitrile      |
| <b>Index No</b>                  | 608-001-00-3                           |
| <b>CAS No</b>                    | 75-05-8                                |
| <b>EC No</b>                     | 200-835-2                              |
| <b>Molecular Formula</b>         | C <sub>2</sub> H <sub>3</sub> N        |
| <b>REACH registration number</b> | 01-2119471307-38                       |

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

|                                       |                                                                                             |
|---------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Recommended Use</b>                | Laboratory chemicals.                                                                       |
| <b>Sector of use</b>                  | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites    |
| <b>Product category</b>               | PC21 - Laboratory chemicals                                                                 |
| <b>Process categories</b>             | PROC15 - Use as a laboratory reagent                                                        |
| <b>Environmental release category</b> | ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates) |
| <b>Uses advised against</b>           | No 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 Pharmaceuticaaan 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

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

Physical hazards

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Flammable liquids

Category 2 (H225)

## Health hazards

Acute oral toxicity

Category 4 (H302)

Acute dermal toxicity

Category 4 (H312)

Acute Inhalation Toxicity - Vapors

Category 4 (H332)

Serious Eye Damage/Eye Irritation

Category 2 (H319)

## Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## Hazard Statements

H225 - Highly flammable liquid and vapor

H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled

H319 - Causes serious eye irritation

## 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 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

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

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

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

## 2.3. Other hazards

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

Toxicity to Soil Dwelling Organisms

Toxic to terrestrial vertebrates

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 % | GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and |
|-----------|--------|-------|----------|-------------------------------------------------------------------------|
|-----------|--------|-------|----------|-------------------------------------------------------------------------|

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|              |         |           |       | UK SI 2020/1567                                                                                                 |
|--------------|---------|-----------|-------|-----------------------------------------------------------------------------------------------------------------|
| Acetonitrile | 75-05-8 | 200-835-2 | <=100 | Flam. Liq. 2 (H225)<br>Acute Tox. 4 (H302)<br>Acute Tox. 4 (H312)<br>Eye Irrit. 2 (H319)<br>Acute Tox. 4 (H332) |

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

ECHA (RAC) - Committee for Risk Assessment - European CHemicals Agency  
ATE - Acute Toxicity Estimate; mg/kg bw - milligrams per kilogram of body weight

|                           |                  |
|---------------------------|------------------|
| REACH registration number | 01-2119471307-38 |
|---------------------------|------------------|

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|                                           |                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General Advice</b>                     | Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.                                                                                                                                                                                                                                                        |
| <b>Eye Contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.                                                                                                                                                                                                                        |
| <b>Skin Contact</b>                       | Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.                                                                                                                                                                                                                                              |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Call a physician or poison control center immediately.                                                                                                                                                                                                                                                                           |
| <b>Inhalation</b>                         | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. |
| <b>Self-Protection of the First Aider</b> | Remove all sources of ignition. Use personal protective equipment as required. 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: Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

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

|                           |                                                                                                                                                                                                                                                       |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Notes to Physician</b> | Treat symptomatically. The effects may be delayed therefore medical observation is essential. Effects may be delayed 7 to 10 hours. May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration. |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

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## Suitable Extinguishing Media

Water spray. CO<sub>2</sub>, dry chemical, dry sand, 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 a solid water stream as it may scatter and spread fire.

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

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

## Hazardous Combustion Products

Hydrogen cyanide (hydrocyanic acid), Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Take precautionary measures against static discharges. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment as required.

### 6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

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

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

### 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. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not get in eyes, on skin, or on clothing. Do not breathe mist/vapors/spray. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

## Hygiene Measures

When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

### 7.2. Conditions for safe storage, including any incompatibilities

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

Technical Rules for Hazardous Substances (TRGS) 510

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Storage Class (LGK) (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, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

| Component    | The United Kingdom                                                                                              | European Union                                               | Ireland                                                                                                                    |
|--------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Acetonitrile | STEL: 60 ppm 15 min<br>STEL: 102 mg/m <sup>3</sup> 15 min<br>TWA: 40 ppm 8 hr<br>TWA: 68 mg/m <sup>3</sup> 8 hr | TWA: 40 ppm (8hr)<br>TWA: 70 mg/m <sup>3</sup> (8hr)<br>Skin | TWA: 40 ppm 8 hr.<br>TWA: 70 mg/m <sup>3</sup> 8 hr.<br>STEL: 120 ppm 15 min<br>STEL: 310 mg/m <sup>3</sup> 15 min<br>Skin |

#### Biological limit values

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

#### 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 ( <=100 ) |                              |                                 |                                | DNEL = 32.2mg/kg<br>bw/day        |

| Component                         | Acute effects local (Inhalation)           | Acute effects systemic (Inhalation)        | Chronic effects local (Inhalation)         | Chronic effects systemic (Inhalation)      |
|-----------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|
| Acetonitrile<br>75-05-8 ( <=100 ) | DNEL = 40.6 ppm<br>(68 mg/m <sup>3</sup> ) | DNEL = 40.6 ppm<br>(68 mg/m <sup>3</sup> ) | DNEL = 40.6 ppm<br>(68 mg/m <sup>3</sup> ) | DNEL = 40.6 ppm<br>(68 mg/m <sup>3</sup> ) |

#### 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 ( <=100 ) | PNEC = 10mg/L | PNEC = 7.53mg/kg<br>sediment dw | PNEC = 10mg/L      | PNEC = 32mg/L                      | PNEC = 2.41mg/kg<br>soil dw |

| Component                         | Marine water | Marine water sediment | Marine water intermittent | Food chain | Air |
|-----------------------------------|--------------|-----------------------|---------------------------|------------|-----|
| Acetonitrile<br>75-05-8 ( <=100 ) | PNEC = 1mg/L |                       |                           |            |     |

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## 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 standard - EN 166)

#### Hand Protection

Protective gloves

| Glove material  | Breakthrough time | Glove thickness | EU standard       | Glove comments                                                                 |
|-----------------|-------------------|-----------------|-------------------|--------------------------------------------------------------------------------|
| Butyl rubber    | > 480 minutes     | 0.35 mm         | EN 374<br>Level 6 | As tested under EN374-3 Determination of Resistance to Permeation by Chemicals |
| Neoprene gloves | < 60 minutes      | 0.45 mm         |                   |                                                                                |

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

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 compatibility, 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

#### 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                     | aromatic                      |                       |
| Odor Threshold           | 170 ppm                       |                       |
| Melting Point/Range      | -46 °C / -50.8 °F             |                       |
| Softening Point          | No data available             |                       |
| Boiling Point/Range      | 81 - 82 °C / 177.8 - 179.6 °F | @ 760 mmHg            |
| Flammability (liquid)    | Highly flammable              | On basis of test data |
| Flammability (solid,gas) | Not applicable                | Liquid                |
| Explosion Limits         | Lower 3 vol %                 |                       |

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|                                         |                                   |                                   |
|-----------------------------------------|-----------------------------------|-----------------------------------|
| Flash Point                             | Upper 16 vol %<br>12.8 °C / 55 °F | Method - No information available |
| Autoignition Temperature                | 525 °C / 977 °F                   |                                   |
| Decomposition Temperature               | No data available                 |                                   |
| pH                                      | Not applicable                    |                                   |
| Viscosity                               | 0.36 cP at 20 °C                  |                                   |
| Water Solubility                        | Miscible                          |                                   |
| Solubility in other solvents            | No information available          |                                   |
| Partition Coefficient (n-octanol/water) |                                   |                                   |
| Component                               | log Pow                           |                                   |
| Acetonitrile                            | -0.34                             |                                   |
| Vapor Pressure                          | 97 mbar @ 20 °C                   |                                   |
| Density / Specific Gravity              | 0.781                             |                                   |
| Bulk Density                            | Not applicable                    | Liquid                            |
| Vapor Density                           | 1.42                              | (Air = 1.0)                       |
| Particle characteristics                | Not applicable (liquid)           |                                   |

## 9.2. Other information

|                      |                                                           |
|----------------------|-----------------------------------------------------------|
| Molecular Formula    | C2 H3 N                                                   |
| Molecular Weight     | 41.05                                                     |
| Explosive Properties | Not explosive Vapors may form explosive mixtures with air |
| Oxidizing Properties | Not oxidising                                             |
| Evaporation Rate     | 5.79 - (Butyl Acetate = 1.0)                              |

## 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 polymerization does not occur. |
| Hazardous Reactions      | No information available.                |

### 10.4. Conditions to avoid

Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.  
Exposure to moisture.

### 10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Reducing Agent. Bases.

### 10.6. Hazardous decomposition products

Hydrogen cyanide (hydrocyanic acid). Nitrogen oxides (NOx). Carbon monoxide (CO).  
Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

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

#### Product Information

(a) acute toxicity;

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|            |            |
|------------|------------|
| Oral       | Category 4 |
| Dermal     | Category 4 |
| Inhalation | Category 4 |

| Component    | LD50 Oral                                         | LD50 Dermal                                   | LC50 Inhalation                                                   |
|--------------|---------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------|
| Acetonitrile | >= 450- <= 787 mg/kg (Rat),<br>OECD Guideline 401 | >= 2000 mg/kg (Rabbit), OECD<br>Guideline 402 | LC50 = 3587 ppm (6.022 mg/l)<br>(Mouse) 4h, OECD Guideline<br>403 |

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

ECHA (RAC) - Committee for Risk Assessment - European Chemicals Agency  
ATE - Acute Toxicity Estimate; mg/kg bw - milligrams per kilogram of body weight

(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 Causes serious eye irritation.

(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 None known.

(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. Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death. Inhalation of high vapor concentrations may cause symptoms like 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

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## 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, based on information available.

### 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 contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Will likely be mobile in the environment due to its volatility. Disperses rapidly in air.

### 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

#### Ozone Depletion Potential

This product does not contain any known or suspected substance

This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Waste from Residues/Unused Products

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.

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## 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

**14.1. UN number** UN1648  
**14.2. UN proper shipping name** ACETONITRILE  
**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  
**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  
**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

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 |
|--------------|---------|-----------|--------|-----|-------|------|----------|------|------|
| Acetonitrile | 75-05-8 | 200-835-2 | -      | -   | X     | X    | KE-00067 | X    | 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     |

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

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| Component    | CAS No  | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|--------------|---------|---------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Acetonitrile | 75-05-8 | -                                                                   | Use restricted. See entry 75.<br>(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 Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|--------------|---------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Acetonitrile | 75-05-8 | 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 |
|--------------|---------------------------------------|-------------------------|
| Acetonitrile | WGK2                                  |                         |

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

## 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

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

# SAFETY DATA SHEET

Acetonitrile

Revision Date 29-Sep-2023

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

**Key literature references and sources for data**

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

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

**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.

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

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.

**Creation Date** 16-Jun-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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**End of Safety Data Sheet**