

SAFETY DATA SHEET

Creation Date 15-Sep-2009

Revision Date 27-Mar-2024

Revision Number 3

1. Identification

Product Name Acetonitrile-d3

Cat No. : 42266

CAS No 2206-26-0
Synonyms No information available

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet**Company**

Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757

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

2. Hazard(s) identification**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|------------------------------------|------------|
| Flammable liquids | Category 2 |
| Acute oral toxicity | Category 4 |
| Acute dermal toxicity | Category 4 |
| Acute Inhalation Toxicity - Vapors | Category 4 |
| Serious Eye Damage/Eye Irritation | Category 2 |

Label Elements**Signal Word**

Danger

Hazard Statements

Highly flammable liquid and vapor
Causes serious eye irritation
Harmful if swallowed, in contact with skin or if inhaled

**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
Use only non-sparking tools
Take precautionary measures against static discharge

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

Skin

Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|-------------------|-----------|----------|
| [2H3]Acetonitrile | 2206-26-0 | >95 |

4. 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. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. |
| Most important symptoms and effects | No information available. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| | |
|---|---|
| Suitable Extinguishing Media | Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | 2 °C / 35.6 °F |
| Method - | No information available |
| Autoignition Temperature | 525 °C / 977 °F |
| Explosion Limits | |
| Upper | 16% |
| Lower | 3% |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

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

Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health
2

Flammability
3

Instability
1

Physical hazards
N/A

6. Accidental release measures

| | |
|---|---|
| Personal Precautions | Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. |
| Environmental Precautions | Should not be released into the environment. |
| Methods for Containment and Clean 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. |

7. Handling and storage

| | |
|-----------------|---|
| Handling | Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. 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.

Storage.

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat, sparks and flame. Protect from moisture. To maintain product quality: Store under an inert atmosphere. Incompatible Materials. Acids. Bases. Reducing Agent. Oxidizing agent.

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH | Mexico OEL (TWA) |
|-------------------|-----------|------------------------------------|----------------------------|------------------|
| [2H3]Acetonitrile | | (Vacated) TWA: 5 mg/m ³ | IDLH: 25 mg/m ³ | |

Legend

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures

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

Personal Protective Equipment**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type:

Organic gases and vapours filter. Type A. Brown. conforming to EN14387.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

| | |
|----------------------------------|--|
| Physical State | Liquid |
| Appearance | Colorless |
| Odor | sweet; aromatic |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | -46 °C / -50.8 °F |
| Boiling Point/Range | 79 - 81 °C / 174.2 - 177.8 °F @ 760 mmHg |
| Flash Point | 2 °C / 35.6 °F |
| Evaporation Rate | 5.79 (Butyl Acetate = 1.0) |
| Flammability (solid,gas) | Not applicable |
| Flammability or explosive limits | |
| Upper | 16% |
| Lower | 3% |
| Vapor Pressure | 97 mbar (20°C) |
| Vapor Density | 1.42 |
| Specific Gravity | 0.844 |
| Solubility | Soluble in water |

| | |
|--|--------------------------|
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | 525 °C / 977 °F |
| Decomposition Temperature | No information available |
| Viscosity | 0.39 cP (20°C) |
| Molecular Formula | C2 D3 N |
| Molecular Weight | 44.07 |

10. Stability and reactivity

| | |
|----------------------------------|---|
| Reactive Hazard | None known, based on information available |
| Stability | Hygroscopic. |
| Conditions to Avoid | Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition. Exposure to moist air or water. |
| Incompatible Materials | Acids, Bases, Reducing Agent, Oxidizing agent |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x) |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

Product Information

Component Information

| | |
|--------------------------------------|--------------------------|
| Toxicologically Synergistic Products | No information available |
|--------------------------------------|--------------------------|

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|-----------------|--|
| Irritation | Irritating to eyes |
| Sensitization | No information available |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|-------------------|-----------|------------|------------|------------|------------|------------|
| [2H3]Acetonitrile | 2206-26-0 | Not listed | Not listed | Not listed | Not listed | Not listed |

| | |
|-------------------|----------------------------|
| Mutagenic Effects | Not mutagenic in AMES Test |
|-------------------|----------------------------|

| | |
|----------------------|---------------------------|
| Reproductive Effects | No information available. |
|----------------------|---------------------------|

| | |
|-----------------------|---------------------------|
| Developmental Effects | No information available. |
|-----------------------|---------------------------|

| | |
|----------------|---------------------------|
| Teratogenicity | No information available. |
|----------------|---------------------------|

| | |
|--------------------------|------------|
| STOT - single exposure | None known |
| STOT - repeated exposure | None known |

| | |
|-------------------|--------------------------|
| Aspiration hazard | No information available |
|-------------------|--------------------------|

| | |
|--|---|
| Symptoms / effects, both acute and delayed | Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting; Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death |
|--|---|

| | |
|---------------------------------|--------------------------|
| Endocrine Disruptor Information | No information available |
|---------------------------------|--------------------------|

Other Adverse Effects

The hazards associated with cyanide may be seen in this product.

12. Ecological information**Ecotoxicity**

Do not empty into drains.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|-------------------|------------------|-----------------|--|------------|
| [2H3]Acetonitrile | Not listed | Not listed | EC50 = 28000 mg/L 48 h EC50 = 73 mg/L 24 h EC50 = 7500 mg/L 15 h | Not listed |

Persistence and Degradability

Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation

No information available.

Mobility

Will likely be mobile in the environment due to its volatility.

13. Disposal considerations**Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information**DOT**

UN-No UN1648
Proper Shipping Name ACETONITRILE
Hazard Class 3
Packing Group II

TDG

UN-No UN1648
Proper Shipping Name ACETONITRILE
Hazard Class 3
Packing Group II

IATA

UN-No UN1648
Proper Shipping Name Acetonitrile
Hazard Class 3
Packing Group II

IMDG/IMO

UN-No UN1648
Proper Shipping Name Acetonitrile
Hazard Class 3
Packing Group II

15. Regulatory information**United States of America Inventory**

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|-------------------|-----------|------|--|--------------------------------|
| [2H3]Acetonitrile | 2206-26-0 | - | - | - |

Legend:**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

-' - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical
Substances & Mixtures, Under TSCA Section 6(h) (PBT)**

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|-------------------|-----------|-----|------|-----------|-------|------|------|------|-------|------|
| [2H3]Acetonitrile | 2206-26-0 | - | - | 218-616-5 | - | X | X | - | - | - |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Component | CAS No | Weight % | SARA 313 - Threshold Values % | SARA 313 - Reporting thresholds |
|-------------------|-----------|----------|-------------------------------|---------------------------------|
| [2H3]Acetonitrile | 2206-26-0 | >95 | 1.0 % | - |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|-------------------|----------------------------|-----------------------------|------------------------|---------------------------|
| [2H3]Acetonitrile | - | - | X | X |

Clean Air Act

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|-------------------|-----------|-------------------------|-------------------------|
| [2H3]Acetonitrile | X | | - |

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-------------------|---------------|------------|--------------|----------|--------------|
| [2H3]Acetonitrile | - | X | X | X | X |

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant Y
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations**Mexico - Grade**

Serious risk, Grade 3

Authorisation/Restrictions according to EU REACH

Not applicable

| 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) |
|-------------------|-----------|---|---|---|
| [2H3]Acetonitrile | 2206-26-0 | - | - | - |

Safety, health and environmental regulations/legislation specific for the substance or mixture

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|-------------------|-----------|----------------|------------------------------|---------------------------|--|
| [2H3]Acetonitrile | 2206-26-0 | Not applicable | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

| 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 | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-------------------|-----------|---|--|----------------------------|------------------------------------|
| [2H3]Acetonitrile | 2206-26-0 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other information**Prepared By**Health, Safety and Environmental Department
Email: chem.techinfo@thermofisher.com
www.thermofisher.com**Creation Date**

15-Sep-2009

Revision Date

27-Mar-2024

Print Date

27-Mar-2024

Revision Summary

New emergency telephone response service provider.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS