

Hazard Statements	Highly flammable liquid and vapour. Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed. Causes serious eye irritation.
Precautionary Statements	Keep away from heat / sparks/open flames/hot surfaces - No smoking. Wear protective gloves / protective clothing / eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Acetonitrile	75-05-8	200-835-2	01-2119471307-38-XXXX	>98%	Flam. Liq. 2, Acute Tox. 4 (O), Acute Tox. 4 (D), Acute Tox. 4 (I), Eye Irrit. 2

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. OBTAIN MEDICAL ATTENTION URGENTLY.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray, alcohol resistant foam, dry powder or carbon dioxide. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards	Vapour-air mixtures are explosive. Vapours may flow along surfaces to distant ignition sources and flash back.
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5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Beware : vapour is heavier than air and will tend to accumulate at low spots. Do not allow general use of area until it is safe to do so.
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6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

Minor Spillage Contain and absorb on inert material. Transfer absorbent to container for removal. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

All transfer systems should be earthed to prevent accumulation of static electricity. Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period	
Acetonitrile	75-05-8	>98%	40.0 ppm	68.0 mg/m-3	60.0 ppm	102.0 mg/m-3

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.

Hand Protection Use solvent resistant gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Clear colourless liquid.

Odour Ethereal.

pH Not applicable

Boiling Point 81.6°C

Melting Point -45.7°C

Flash Point 2°C (Closed cup)

Upper Flammable Limit 17%

Lower Flammable Limit 3%

Auto Ignition 524°C

Explosive Properties Moderate/severe in confined spaces.

Oxidising Properties No.

Vapour Pressure	72.7559mmHg @ 20°C
Relative Density	0.7820
Water Solubility	Completely miscible in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity	No data available.
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
10.5 Incompatible Materials	Strong oxidising agents. Fuming nitric, concentrated sulphuric and perchloric acids, iron perchlorate and N-fluoro compounds.
10.6 Hazardous Decomposition Products	Will evolve very toxic fumes of cyanide if involved in a fire or heated to decomposition.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the liquid will cause moderate to severe irritation and may result in corneal injury. High concentrations of vapour may be irritating to the eyes.
Skin	Can be absorbed through the skin and may cause irritation and dermatitis. Skin absorption may be an important exposure route producing toxic effects similar to inhalation.
LD50 Skin	1250mg/kg Rabbit
Ingestion	Harmful if swallowed. Ingestion causes similar effects to vapour inhalation.
LD50 Oral	3800mg/kg Rat
Inhalation	Exposure to vapour concentrations above the occupational exposure limits may produce irritation of the eyes, nose, throat and respiratory tract. High concentrations of vapour may result in headaches, dizziness, exhaustion, mental instability, drowsiness and paralysis. Fatal cases of inhalation exposure have occurred. Usually there is a latent period of several hours before the onset of symptoms.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	Not teratogenic but high doses have caused maternal and foetal toxicity.

Section 12. Ecological

12.1 Toxicity	Non-hazardous to aquatic species (TLm96 > 1000mg/l) BOD 5 day = 37% ThOD. Unlikely to bio-accumulate.
LC50 Algal	Not available
LC50 Crustacea	Not available
LC50 Fish	Not available
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT & vPvB assessment	Assessment not required.
12.6 Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of explosion.
Contaminated Packaging	Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

Section 14. Transport Information

14.1 UN Number	1648
14.2 Proper Shipping Name	Acetonitrile
14.3 Transport classes	
UN classification	3
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	33
Tunnel Restriction Code	D/E
14.4 Packing Group	II
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Flammable liquid, category 2; Acute toxicity, category 4 (oral); Acute toxicity, category 4 (dermal); Acute toxicity, category 4 (inhalation); Serious eye damage/irritation, category 2
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H225, H332, H312, H302, H319 Highly flammable liquid and vapour. Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed. Causes serious eye irritation.
Hazard Statements (Packs of 100ml/g or less)	H225, H332, H312, H302, H319 Highly flammable liquid and vapour. Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed. Causes serious eye irritation.
Precautionary Statements	P210, P280, P305+P351+P338 Keep away from heat / sparks/open flames/hot surfaces - No smoking. Wear protective gloves / protective clothing / eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.
Precautionary Statements (Packs of 100ml/g or less)	P210, P280 Keep away from heat / sparks/open flames/hot surfaces - No smoking. Wear protective gloves / protective clothing / eye protection / face protection.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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