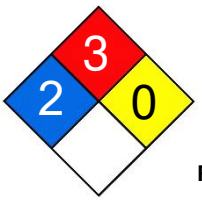
Material Safety Data Sheets



Revision 2

1. IDENTIFICATION

Product Name	**Acetonitrile**
Other Names	**Cyanomethane; Cyanure de methyl; Ethanenitrile**
Uses	**Laboratory. For professional use only**
Chemical Family	**No Data Available**
Chemical Formula	**CH_3CN**
Chemical Name	
Product Description	**No Data Available**
Company	**Arman sina.co**
Contact Information	info@armansina.com www.armansina.com

2. HAZARD IDENTIFICATION

Hazard Categories	Highly flammable Harmful
Risk Phrases	Highly flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes.
Safety Phrases	Keep locked up and out of reach of children. Keep away from sources of ignition - No smoking. Wear suitable protective clothing and gloves.

Symbol

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Acetonitrile	CH_3CN	75-05-8	>95 - 100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Obtain emergency medical attention. Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.
Eye	Get medical advice. If eye irritation persists : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
Skin	Wash with plenty of soap and water. Wash contaminated clothing before reuse. Specific treatment (see on this label). Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor.
Inhaled	Assure fresh air breathing. Allow the victim to rest. Remove to fresh air and keep at rest in a position Comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
Advice to Doctor	Treat symptomatically.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	
Extinguishing Media	Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Surrounding fires : Use water spray or fog for cooling exposed containers.
Fire and Explosion Hazard	Flammable class : Highly flammable liquid and vapour.
Hazardous Products of Combustion	Under fire conditions, hazardous fumes will be present.
Special Fire Fighting Instructions	Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Personal Protective Equipment	Do not enter fire area without proper protective equipment, including respiratory protection.
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	For emergency responders : Equip cleanup crew with proper protection. Ventilate area. Technical measures : Use special care to avoid static electric charges. Special precautions : Remove ignition sources. No naked lights. No smoking. For non-emergency personnel : Evacuate unnecessary personnel.
Clean Up Procedures	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage
Containment	Do not touch or walk through spilled material. Prevent entry into waterways, sewers, basements or confined areas.
Decontamination	No information available.
Environmental Precautionary Measures	Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	**Use personal protective equipment as required (see SECTION 8).** *Use respiratory protective device against the effects of fumes/dust/aerosol.

7. HANDLING AND STORAGE

Handling

Handle empty containers with care because residual vapours are flammable. Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Technical protective measures : Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, lighting, …, equipment. Special precautions : No naked lights. No smoking.

Storage

Storage : Keep only in the original container in a cool, well ventilated place. Keep in fireproof place. Ground/bond container and receiving equipment. Keep container tightly closed.
Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

Container

Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General

Exposure Limits

101 mg/m3

Biological Limits

60 ppm

Engineering Measures

Personal Protection Equipment

Personal protection : Avoid all unnecessary exposure. • Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. • Hand protection : Wear protective gloves. • Eye protection : Chemical goggles or safety glasses. • Others : When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid.
Appearance	Clear Colorless
Odour	Ether odor
Colour	colourless
pH	No Data Available
Vapour Pressure	97.3 hPa at 20 °C(68 °F)
Relative Vapour Density	No Data Available
Boiling Point	82 °C at 1,013 hPa
Melting Point	46 °C
Freezing Point	No Data Available
Solubility	Soluble in water
Specific Gravity	No Data Available
Flash Point	43 °F (6 °C) Method: open cup
Auto Ignition Temp	No Data Available
Evaporation Rate	5,79
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	0.7822 g/cm3 at 20 °C
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No information available.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	No information available.
Reactions That Release Gases or Vapours	No information available.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Not established
Chemical Stability	Stable under recommended storage conditions
Conditions to Avoid	Direct sunlight. Extremely high or low temperatures. Open flame.
Materials to Avoid	Strong acids. Strong bases.
Hazardous Decomposition Products	Fumes. Carbon monoxide. Carbon dioxide. May release flammable gases.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information

Information on toxicological effects:

Skin irritation :
Species: Rabbit Result: No skin irritation Method: OECD Test Guideline 404 Exposure time: 4 h
Eye irritation :
Species: Rabbit Result: Irritating to eyes. Method: OECD Test Guideline 405
Sensitisation :
Buehler Test Species: Guinea pig Result: Did not cause sensitisation on laboratory animals. Method: OECD Test Guideline 406
Further information :
STOT - single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1. May cause convulsions. May cause neurotoxic effects. Based on Human Evidence.

Acute

Ingestion

Acute inhalation toxicity : LC50: 3587 ppm, vapour
Exposure time: 4 h Species: Mouse, male and female Method: OECD Test Guideline 403 A
cute dermal toxicity : LD50: > 2,000 mg/kg Species: Rabbit

Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish : flow-through test LC50: 1,640 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow)
Persistence/Degradability	Biodegradable.
Mobility	No information available.
Environmental Fate	Avoid release to the environment.
Bioaccumulation Potential	No information available.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Special Precautions for Land Fill	Handle empty containers with care because residual vapours are flammable

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	ACETONITRILE
Class	F1
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	1648
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

Proper Shipping Name	ACETONITRILE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	1648
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

Proper Shipping Name	ACETONITRILE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	1648
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

15. OTHER INFORMATION

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Key/Legend

< Less Than
> Greater Than
AICS Australian Inventory of Chemical Substances
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm² Square Centimetres
CO2 Carbon Dioxide
COD Chemical Oxygen Demand
deg C (° C) Degrees Celcius
EPA (New Zealand) Environmental Protection Authority of New Zealand
deg F (° F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight