1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Acetonitrile
Synonyms	Methyl cyanide, ACN
Grade	ACS, HPLC, HPLC-prep, Pesticide, Anapremium, Dehydrous, LCMS, UPLC
Company	Anaqua Chemicals Supply
	1510 Eldridge Parkway, Suite 110-268 Houston, TX 77077, USA
Telephone	(281) 668-0032
Fax	(281) 668-0033

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Formula	C_2H_3N
CAS-No.	75-05-8
Index-No.	608-001-00-3
Ec-No.	200-835-2
Concentration	≥ 99.5 %

3. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids	Category 2
Acute toxicity, Inhalation	Category 4
Acute toxicity, Dermal	Category 4
Acute toxicity, Oral	Category 4
Eye irritation	Category 2

According to European Directive 67/548/EEC as amended.

Highly flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes.

4. FIRST AID MEASURES

Inhalation	If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
	Rinse mouth with water. Consult a physician immediately.
Skin Contact	Immediately wash off with soap and plenty of water. Consult a physician.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.

Most important symptoms and effects, both acute and delayed

Treat as cyanide poisoning. Always have a cyanide first-aid kit on hand, together with proper instructions. The onset of symptoms is generally delayed pending conversion to cyanide. Nausea, Vomiting, Diarrhoea, Headache, Dizziness, Rash, Cyanosis, excitement, depression, Drowsiness, impaired judgment, Lack of coordination, stupor, death

Indication of immediate medical attention and special treatment needed

No available information

---

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
Specific hazards during fire fighting	Carbon oxides, nitrogen oxides (NO_x), Hydrogen cyanide (hydrocyanic acid)
Special protective equipment for fire-fighters	Wear self contained breathing apparatus for fighting fire if necessary. Use water spray to cool unopened containers.

---

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

---

7. HANDLING AND STORAGE

Handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
Storage	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

---

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational exposure controls

Engineering Measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective Equipment

Respiratory protection	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Eye / face protection	Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Body protection	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid, clear
Color	Colorless
pH	No available information
Melting point	-48 ℃ (-54.4 ℉)
Boiling point	81 ℃ (177.8 ℉)
Flash point	2 ℃ (35.6 ℉) - closed cup
Ignition temperature	523 ℃
Lower explosion limit	4.4 % (V)
Upper explosion limit	16 % (V)
Vapor pressure	97.1 hPa at 20.0 ℃ (68.0 ℉)
Density	0.786 g/ mL at 25 ℃ (77 ℉)
Water solubility	Completely soluble
Partition coefficient: n-octanol/ water	log Pow: -0.34
Molecular weight	41.05
Decomposition temperature	No available information
Viscosity	No available information
Explosive properties	No available information
Oxidizing properties	No available information

10. STABILITY AND REACTIVITY

Storage stability	No available information
Conditions to avoid	Heat, flames and sparks. Extremes of temperature and direct sunlight.
Materials to avoid	Acids, Bases, Oxidizing agents, Reducing agents, Alkali metals
Hazardous decomposition products	No available information

11. TOXICOLOGICAL INFORMATION

Acute toxicity		LD50 Oral 2,460 mg/kg (Rat) LD50 Dermal 2,000 mg/kg (Rabbit) LC50 Inhalation 7,551 ppm (Rat) 8 h Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Convulsions or effect on seizure threshold. Blood: Hemorrhage.
Skin irritation		Mild skin irritation (Rabbit) 24 h
Eye irritation		Severe eye irritation (Rabbit) 24 h
Sensitization		Did not cause sensitization on laboratory animals.
Germ cell mutagenicity		No available information
Specific target organ toxicity – single exposure (GHS)		No available information
Specific target organ toxicity – repeated exposure (GHS)		No available information
Carcinogenicity		No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity		No available information
Aspiration hazard		No available information
Potential health effects	**Inhalation**	Harmful if inhaled. May cause respiratory tract irritation.
	Ingestion	Harmful if swallowed.
	Skin	Harmful if absorbed through skin. May cause skin irritation.
	Eyes	Causes eye burns.
Signs and Symptoms of Exposure		Treat as cyanide poisoning. Always have on hand a cyanide first-aid kit, together with proper instructions. The onset of symptoms is generally delayed pending conversion to cyanide., Nausea, Vomiting, Diarrhoea, Headache, Dizziness, Rash, Cyanosis, excitement, depression, Drowsiness, impaired judgment, Lack of coordination, stupor, death
Additional Information		RTECS: AL7700000

12. ECOLOGICAL INFORMATION

Ecotoxicity	
Persistence and degradability	No available information
Toxicity to fish	LC50 1,640.00 mg/l (Pimephales promelas (fathead minnow)) 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 3,600.00 mg/l (Daphnia magna (Water flea)) 48 h NOEC 640 mg/l (Daphnia magna (Water flea)) 14 d
Bioaccumulative potential	No available information
Results of PBT and vPvB assessment	No available information
Mobility	No available information
Other adverse effects	No available information

13. DISPOSAL CONSIDERATIONS

Product	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging	Dispose of as unused product.

14. TRANSPORT INFORMATION

IATA

UN-Number: 1648 Class: 3 Packing group: III

Proper shipping name: Acetonitrile

IMDG

UN-Number: 1648 Class: 3 Packing group: III

Proper shipping name: Acetonitrile

EMS-No. F-E, S-D

DOT (US)

UN-Number: 1648 Class: 3 Packing group: III

Proper shipping name: Acetonitrile

Marine pollution: No

15. REGULATORY INFORMATION

Hazard statements

H225: Highly flammable liquid and vapour

H319 :Causes serious eye irritation

H302: Harmful if swallowed

H312: Harmful in contact with skin

H332: Harmful if inhaled

Precautionary statements

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P280: Wear protective gloves/ protective clothing.

P305 + P351 + P338: Rinse cautiously with water for several minutes if in eyes. Remove contact lenses, if present and easy to do.

GHS-Labeling

Pictogram

Signal word *Danger*

Labeling according to EC Directive

Symbol(s): Xi- Irritant F- Highly flammable

R-phrase(s): 11-20/21/22-36

Highly flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes.

S-phrase(s): 16-36/37

Keep away from sources of ignition - No smoking. Wear suitable protective clothing and gloves.

---

16. OTHER INFORMATION

 The information, data, and recommendations in this material safety data sheet relate only to the specific material designated herein and do not relate to use in combination with any other material or in any process. The information, data, and recommendations set forth herein are believed by us to be accurate. We make no warranties, either expressed or implied, with respect thereto and assume no liability in connection with any use of such information, data, and recommendations.