Safety Data Sheet

Material Name: METHYL ACETYLENE **SDS ID: 00233337**

* * * Section 1 - PRODUCT AND COMPANY IDENTIFICATION * * *

Material Name: METHYL ACETYLENE

Manufacturer Information

ADVANCED GAS TECHNOLOGIES
1401 Stauffer Road
Palm, PA 18070-0035
Mfg Contact: Outside the US: 703-572-3887 (Collect Calls Accepted)

Phone: 1-800-416-2505

Emergency # 1-800-424-9300 (CHEMTREC

Chemical Family

hydrocarbons, aliphatic

Synonyms

Mtg msds 216; Propyne; Allylene; Propine; 1-Propyne; C3H4; RTECS: UK4250000

* * * Section 2 - HAZARDS IDENTIFICATION * * *

EMERGENCY OVERVIEW

Color: colorless
Physical Form: liquefied gas
Odor: sweet odor
Health Hazards: central nervous system depression
Physical Hazards: Flammable gas. May cause flash fire. May decompose violently at room temperature.

POTENTIAL HEALTH EFFECTS

Inhalation

Short Term: irritation, difficulty breathing, headache, drowsiness, dizziness, loss of coordination, dilated pupils, unconsciousness
Long Term: convulsions

Skin

Short Term: frostbite
Long Term: no information is available

Eye

Short Term: frostbite
Long Term: no information is available

Ingestion

Short Term: ingestion of a gas is unlikely
Long Term: ingestion of a gas is unlikely

* * * Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS * * *

CAS	Component	Percent
74-99-7	Methyl acetylene	100

* * * Section 4 - FIRST AID MEASURES * * *

Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

Skin

If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115 F; 41-46 C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.

Eyes

Contact with liquid: Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Ingestion

If a large amount is swallowed, get medical attention.

Note to Physicians

For inhalation, consider oxygen.

* * * Section 5 - FIRE FIGHTING MEASURES * * *

See Section 9 for Flammability Properties

NFPA Ratings: Health: 2 **Fire:** 4 **Reactivity:** 2

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Flammable Properties

Containers may rupture or explode if exposed to heat. Flammable.

Extinguishing Media

carbon dioxide regular dry chemical

Large fires: Flood with fine water spray.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck: Stop leak if possible without personal risk. Let burn unless leak can be stopped immediately. For smaller tanks or cylinders, extinguish and isolate from other flammables. Evacuation radius: 800 meters (1/2 mile). Do not attempt to extinguish fire unless flow of material can be stopped first. Flood with fine water spray. Cool containers with water spray until well after the fire is out. Apply water from a protected location or from a safe distance. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Evacuate if fire gets out of control or containers are directly exposed to fire. Evacuation radius: 500 meters (1/3 mile). Consider downwind evacuation if material is leaking.

Thermal Decomposition Products

Combustion: oxides of carbon

* * * Section 6 - ACCIDENTAL RELEASE MEASURES * * *

Occupational spill/release

Avoid heat, flames, sparks and other sources of ignition. Do not touch spilled material. Stop leak if possible without personal risk. Reduce vapors with water spray. Keep unnecessary people away, isolate hazard area and deny entry. Remove sources of ignition. Ventilate closed spaces before entering.

* * * Section 7 - HANDLING AND STORAGE * * *

Storage Procedures

Store and handle in accordance with all current regulations and standards. Store in a cool, dry place. Store in a well-ventilated area. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Keep separated from incompatible substances.

* * * Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION * * *

Component Analysis

Methyl acetylene (74-99-7)

ACGIH:	1000 ppm TWA
OSHA (final):	1000 ppm TWA; 1650 mg/m3 TWA
OSHA (vacated):	1000 ppm TWA; 1650 mg/m3 TWA
NIOSH:	1000 ppm TWA; 1650 mg/m3 TWA

IDLH

1700 ppm

Ventilation

Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face

For the gas: Eye protection not required, but recommended. For the liquid: Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Protective Clothing

For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing.

Glove Recommendations

Wear insulated gloves.

Respiratory Protection

The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA.
1700 ppm
Any supplied-air respirator.
Any self-contained breathing apparatus with a full facepiece.
Emergency or planned entry into unknown concentrations or IDLH conditions -
Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.
Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

Escape -
Any air-purifying full-facepiece respirator (gas mask) with a chin-style, front-mounted or back-mounted organic vapor canister.
Any appropriate escape-type, self-contained breathing apparatus.

* * * Section 9 - PHYSICAL AND CHEMICAL PROPERTIES * * *

Physical State:	Gas	**Appearance:**	Not available
Color:	colorless	**Physical Form:**	liquefied gas
Odor:	sweet odor	**Odor Threshold:**	Not available
Melting Point:	-102.7 °C	**Boiling Point:**	-23.2 °C @ 760 mmHg
Flash Point:	flammable	**LEL:**	1.7 % by volume
UEL:	11.7 % by volume	**Vapor Pressure:**	3876 mmHg @ 20 °C
Henry's Law Constant:	0.011 (estimated)	**Vapor Density (air = 1):**	1.4
Specific Gravity (water = 1):	0.7062 @ -50 °C	**Water Solubility:**	3.640 mg/mL @ 25 °C (slightly soluble)
KOC:	10 - 75	**Viscosity:**	0.26 mPa.s @ -40.15 °C (liquid)
Molecular Weight:	40.07	**Molecular Formula:**	C3-H4

Solvent Solubility

Soluble: alcohol, benzene, chloroform

* * * Section 10 - STABILITY AND REACTIVITY * * *

Chemical Stability

May decompose violently at room temperature.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Containers may rupture or explode if exposed to heat.

Materials to Avoid

oxidizing materials, metals, halogens, copper, copper alloys, chlorine.

Combustion: oxides of carbon

Possibility of Hazardous Reactions

Will not polymerize.

* * * Section 11 - TOXICOLOGICAL INFORMATION * * *

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

Acute Toxicity Level

Methyl acetylene (74-99-7)

Slightly Toxic: inhalation.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, OSHA or DFG.

Target Organs

Methyl acetylene (74-99-7)

central nervous system.

* * * Section 12 - ECOLOGICAL INFORMATION * * *

Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components.

* * * Section 13 - DISPOSAL CONSIDERATIONS * * *

Disposal Methods

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. D003.

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

* * * Section 14 - TRANSPORT INFORMATION * * *

US DOT Information

Shipping Name: Compressed gas, flammable, n.o.s. (Contains: Methyl acetylene)
UN/NA #: UN1954 **Hazard Class:** 2.1
Required Label(s): 2.1

TDG Information

Shipping Name: Compressed gas, flammable, n.o.s. (Contains: Methyl acetylene)
UN #: UN1954 **Hazard Class:** 2.1
Required Label(s): 2.1

* * * Section 15 - REGULATORY INFORMATION * * *

U.S. Federal Regulations

None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312

Acute Health: Yes **Chronic Health:** No **Fire:** Yes **Pressure:** Yes **Reactive:** Yes

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Methyl acetylene	74-99-7	Yes	Yes	Yes	Yes	Yes	Yes

Not regulated under California Proposition 65

Canada WHMIS

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:
Methyl acetylene (74-99-7)
1 %

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
Methyl acetylene	74-99-7	Yes	DSL	EIN	Yes	Yes	Yes	Yes	No	Yes

* * * Section 16 - OTHER INFORMATION * * *

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Communicty; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Farenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

End of Sheet 00233337