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Material Safety Data Sheet

PROPYLENE

Revision 09/04.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Advanced Gas Technologies
1401 Stauffer Road
Palm, PA 18070.

Telephone Number: (215) 541-4116

MSDS IDENTIFICATION CODE / NUMBER: **PL**

EMERGENCY TELEPHONE NUMBER
CHEMTREC (800) 424-9300

PRODUCT NAME: Propylene
CAS NUMBER: 115-07-1
CHEMICAL FAMILY: Aliphatic hydrocarbon
CHEMICAL FORMULA: C3 H 6
SYNONYMS: Propene, Methylethene.

2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT NAME	EXPOSURE LIMITS	CONCENTRATION PERCENT BY WEIGHT
Propylene		100
CAS NUMBER: 115-07-1	OSHA PEL-TWA: TLV-ACGIH- IDLH:	

3. HAZARDS INDENTIFICATION

EYE EFFECTS:
No adverse effects have been reported from the gas. Due to rapid evaporation, the liquid may cause frostbite with redness, pain, and blurred vision.

SKIN EFFECTS:
No adverse effects have been reported from the gas. Due to rapid evaporation, the liquid may cause frostbite with redness, tingling and pain or numbness. In more sever cases, the skin may become hard and white and develop blisters.

INGESTION EFFECTS:
Ingestion is unlikely.

INHALATION EFFECTS:
High concentrations may cause mild mucous membrane irritation and anesthesia. Humans exposed to 6.4% for 2 minutes, experienced mild intoxication, paresthesias and inability to concentrate. At 24%, unconsciousness occurred in 3 minutes., 35-40% resulted in vomiting and vertigo, 40-75% for a few mins.caused initial reddening of the eyelids, facial flushing, lacrimation, coughing and flexing of the legs. No variation in respiratory or pulse rates or EKG were noted.

4. FIRST AID MEASURES

EYES
Wash with large amounts of water or normal saline until no evidence of chemical remains (at least 15-20 mins.). Get medical attention immediately.

SKIN
Wash if needed. If frostbite, freezing, or cryogenic burns occur,warm affected area in warm water. If this is not available, gently wrap affected parts in blankets. Allow circulation to return naturally.

INGESTION
Not normally required. Seek immediate medical attention.

INHALATION:
When safe to enter area, remove from exposure. Use a bag valve mask of similar device to perform artificial respiration (rescue breathing) if need. Keep warm and at res. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
FLASH POINT:-162 ^{o}F -108 ^{o}C
AUTOIGNITION: 851 ^{o}F 455 ^{o}C
LOWER EXPOLSIVE LIMIT (%): 2.4
UPPER EXPLOSIVE LIMIT (%): 11

FIRE AND EXPLOSION HAZARDS
Severe fire hazard. Vapor/air mixtures are explosive above flash point. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Electrostatic charges may be generated by flow, agitation, etc. May result in ignition or explosion.

EXTINGUISHING MEDIA
Carbon dioxide, regular dry chemical.

FIRE FIGHTING INSTRUCTIONS
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 you can do it without risk. Let burn unless leak can be stopped immediately. For smaller tanks or cylinders, extinguish and isolate from other flammables.cuation radius: 800 meters (½ mile). Stop flow of gas.

6. ACCIDENTAL RELEASE MEASURES

Avoid heat, flames, sparks and other sources of ignition. Do not touch spilled material. Stop leak if you can do it without 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.If leak is in container or container valve, contact the appropriate emergency telephone number listed in Section 1 or call Advanced Gas Tech. or CHEMTREC.

7. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS

Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U>S> OSHA 29 CFR 1910.110. Protect from physical damage. Store in a cool, dry, place Ventilation required. Avoid heat, flames, sparks and other sources of ignition. Store outside or in a detached building. Grounding and bonding required. Keep separated from incompatible substances.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE / FACE PROTECTION
For the gas no protection required. For the liquid: Wear splash resistant safety goggles.
SKIN
Wear insulated gloves.

RESPIRATORY PROTECTION
Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits. Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum.

9. PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL PROPERTIES
BOILING POINT: -53 ^{o} F -47 ^{o} C
MELTING POINT: -301.45 ^{o} F -185.25 ^{o}C
VAPOR PRESSURE: 7828mmHg @ 21.1 ^{o}C
VAPOR DENSITY (AIR=1) : 1.5
SOLUBILITY (H20): 45%
Odor: no information available.
Physical description: Colorless gas.

10. STABILITY AND REACTIVITY

STABILITY: Stable at normal temperatures and pressure.

INCOMPATIBLE MATERIALS
Oxidizing materials, halo carbons,halogens, acids.

HAZARDOUS DECOMPOSITION PRODUCTS
Thermal decomposition products: miscellaneous decomposition products.

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11. TOXICOLOGICAL INFORMATION

Toxicity data; >86 gm/3/4 hours inhalation-rat LC: 5000ppm/6 hours -2 years. Carcinogen status: Human inadequate evidence. A4- Not classifiable as a human carcinogen. Target organs: Central nervous system. Stimulants such as epinephrine may induce vetricular fibrillation.

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Propylene
HAZARD CLASS: 2.1
DOT IDENTIFICATION NUMBER: UN1077
DOT SHIPPING LABEL: Flammable Gas

15. REGULATORY INFORMATION

SARA TITLE III NOTIFICATIONS AND INFORMATION

SARA TITLE III - HAZARD CLASSES: Acute Health Hazard
Fire Hazard
Reactive
Sudden Release of Pressure Hazard

16. OTHER INFORMATION

NFPA HAZARD RATING - HEALTH 1 Slight Hazard
FIRE 4 Severe Hazard
REACTIVITY 0 No Hazard

MSDS IDENTIFICATION CODE / NUMBER: PL

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