

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS



A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

PROPYLENE

Page: 1
Date Prepared: Dec. 14, 1995
MSDS NO.: 94605000

SECTION #1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Propylene

CHEMICAL NAME: Propene

CAS 115-07-1

CHEMICAL FAMILY: Alkenes

PRODUCT DESCRIPTION: Colorless liquid or gas.

CONTACT ADDRESS:

EXXON CHEMICAL AMERICAS
P.O. BOX 3272, HOUSTON, TEXAS 77253-3272

**	EMERGENCY TELEPHONE NUMBERS: (24 Hours)	**
**	CHEMTREC (800) 424-9300	**
**	EXXON CHEMICAL AMERICAS (800) 726-2015	**

NON EMERGENCY TELEPHONE NUMBERS: (8 am - 5 pm M-F)
FOR HEALTH AND SAFETY INFORMATION CALL: (713) 870-6884
FOR GENERAL PRODUCT INFORMATION CALL: (713) 870-6000

SECTION #2 - COMPOSITION/INFORMATION ON INGREDIENTS

This product is hazardous as defined in 29 CFR1910.1200.

OSHA HAZARD

Flammable

OSHA PEL

SECTION #3 - HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYE CONTACT:

Exposure to rapidly expanding gas or vaporizing liquids may cause frostbite (cold burns) or tissue damage.

SKIN CONTACT:

Exposure to rapidly expanding gas or vaporizing liquid may cause frostbite ("cold" burn). In case of frostbite, place affected area in warm water until circulation returns.

INHALATION:

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.
Is an asphyxiant if allowed to accumulate in confined spaces to concentrations that reduce oxygen below safe breathing levels.

INGESTION:

No hazard in normal industrial use.

SECTION #4 - FIRST AID MEASURES

EYE CONTACT:

First aid is normally not required.

SKIN CONTACT:

In case of cold burns caused by rapidly expanding gas or vaporizing liquid, get prompt medical attention.



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Page: 2
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SECTION #4 - FIRST AID MEASURES (CONTINUED)

INHALATION:

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION:

First aid is not applicable.

SECTION #5 - FIRE FIGHTING MEASURES

FLASHPOINT: -162 Deg F. **METHOD:** ASTM D56 **NOTE:** (Estimated; gas)
FLAMMABLE LIMITS: LEL: 2.0 UEL: 11.1
AUTOIGNITION TEMPERATURE: 856 Deg F.

GENERAL HAZARD

Extremely Flammable, material will readily ignite at ambient temperatures. Flammable Gas, can readily form flammable mixtures at or above the flashpoint. Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge. Auto-refrigeration, drains can become plugged and valves may become inoperable because of the formation of ice due to expanding vapors or vaporizing liquids.

FIRE FIGHTING

Use water spray to cool fire exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam. Remove compressed gas cylinders from fire area if possible.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS

No unusual

SECTION #6 - ACCIDENTAL RELEASE MEASURES

LAND SPILL

Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 15 REGULATORY INFORMATION) notify the National Response Center.

Allow to evaporate.

Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

WATER SPILL

Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear.

Allow to evaporate from surface.

Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.



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Page: 3
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SECTION #7 - STORAGE AND HANDLING

ELECTROSTATIC ACCUMULATION HAZARD:

Yes, use proper grounding procedure

STORAGE TEMPERATURE, ° F:

See Notes

LOADING/UNLOADING TEMPERATURE, ° F:

-76

STORAGE/TRANSPORT PRESSURE, mmHg:

See Notes

LOADING/UNLOADING VISCOSITY, cSt:

0.2

STORAGE AND HANDLING:

Keep container closed. Handle open containers with care.
Store in a cool, well ventilated place away from incompatible materials.
Do NOT handle or store near an open flame, heat or other sources of ignition. Protect material from direct sunlight.
Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper grounding procedures.
Do NOT pressurize, cut, heat, or weld containers. Empty product containers may contain product residue. Do NOT reuse empty containers without commercial cleaning or reconditioning.

SECTION #8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be stored and handled in a lab hood. Provide mechanical ventilation of confined spaces. See respiratory protection recommendations.
Use explosion-proof ventilation equipment.

PERSONAL PROTECTION

Gloves and safety glasses should be worn.
Where it is likely that frostbite hazards may occur from vaporizing liquid and expanding vapor, prevent contact with eyes and skin. Wear safety glasses with side shields, long sleeves and insulating gloves.
Where concentrations in air may exceed the limits given in this Section and engineering, work practice of other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

WORKPLACE EXPOSURE GUIDELINES

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS:

a TWA of 1000 ppm (1800 mg/m³) for Propane
The recommended permissible exposure levels indicated above reflect the levels revised by OSHA in 1989 or in subsequent regulatory activity. Although the 1989 levels have since been vacated by the 11th Circuit Court of Appeals, Exxon Chemical recommends that the lower exposure levels be observed as reasonable worker protection.

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:

The ACGIH has no Threshold Limit Value for Propane, but considers it a simple asphyxiant.

EXXON RECOMMENDS THE FOLLOWING OCCUPATIONAL EXPOSURE LIMITS:

1000 ppm based on composition.
Exxon recommends an 8 hour TWA of 1000 ppm for Propane.



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PROPYLENE

Page: 4
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MSDS NO.: 94605000

SECTION #9 - PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY AT ° F:

0.52 at 60

VAPOR PRESSURE, mmHg at ° F:

473 at -71
1.673 at -20

SOLUBILITY IN WATER, wt. % at ° F:

0.02 at 100

VISCOSITY OF LIQUID, cSt at ° F:

0.2 at 75

SP. GRAV. OF VAPOR, at 1 atm (Air=1):

1.46

FREEZING/MELTING POINT, °F:

-301

EVAPORATION RATE, n-Bu Acetate=1:

Not Available

BOILING POINT, °F:

-54

SECTION #10 - STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITIONS TO AVOID INSTABILITY:

Air contamination - causes peroxide formation.

HAZARDOUS POLYMERIZATION:

Will not occur

CONDITIONS TO AVOID HAZARDOUS POLYMERIZATION:

Not Applicable

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY:

Concentrated mineral acids, halogens, nitrogen dioxide, oxidizing agents,
molten sulfur, halogenated compounds

HAZARDOUS DECOMPOSITION PRODUCTS:

None

SECTION #11 - TOXICOLOGICAL INFORMATION

Please refer to Section 3 for available information on potential health effects.

SECTION #12 - ECOLOGICAL INFORMATION

No specific ecological data are available for this product. Please refer to Section 6 for information regarding accidental releases and Section 15 for regulatory reporting information.

SECTION #13 - DISPOSAL CONSIDERATIONS

Please refer to Sections 5, 6 and 15 for disposal and regulatory information.

SECTION #14 - TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT):

DOT SHIPPING DESCRIPTION: PROPYLENE, 2.1, UN 1077

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PROPYLENE

Page: 5
Date Prepared: Dec. 14, 1995
MSDS NO.: 94605000

SECTION #15 - REGULATORY INFORMATION

TSCA:

This product is listed on the TSCA inventory at CAS Registry Number 115-07-1

CERCLA:

If this product is accidentally spilled, it is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). We recommend you contact local authorities to determine if there may be other local reporting requirements.

SARA TITLE III:

Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories: Delayed Health, Fire, Sudden Release of Pressure.

This information may be subject to the provisions of the Community Right-to-Know Reporting Requirements (40 CFR 370) if threshold quantity criteria are met.

This product contains the following Section 313 Reportable Ingredients:

<u>COMPONENT:</u>	<u>CAS NO.</u>	<u>MAXIMUM %</u>
Propylene	115-07-1	99.0

SECTION #16 - OTHER INFORMATION

NOTES:

1. This material may also be handled at ambient temperature at pressures of up to 689 kPa (100 psig). Storage transport temperature: For refrigerated storage, -60 Deg. C (-75 Deg. F)

REVISION SUMMARY:

Since March 1, 1995 this MSDS has been revised in Section(s): 14

REFERENCE NUMBER:

HDHA-L-10012

SUPERSEDES ISSUE DATE:

March 1, 1995

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS, SUCH INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, SUCH INFORMATION FOR HIS OWN PARTICULAR USE. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION NOR DO WE OFFER WARRANTY AGAINST PATENT INFRINGEMENT.