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**MATERIAL
SAFETY
DATA SHEET**
No. 60

SECTION 1. PRODUCT INFORMATION

NAME: Propylene

TRADE NAME AND SYNONYMS: Propylene; Propene; Liquefied Petroleum Gas (D.O.T.)

APPEARANCE AND ODOR: Colorless liquid and vapor with a mild olefinic odor

CHEMICAL NAME AND SYNONYMS: Propylene; Propene

CAS #: 115-07-1

DOT I.D. No: UN 1077 or if Liquefied Petroleum Gas UN 1075

DOT HAZARD CLASS: Division 2.1

CHEMICAL FORMULA: CH₂CHCH₃ or C₃H₆

CHEMICAL FAMILY: Monoolefin

ISSUE DATE AND REVISIONS: Revised November 2005

SECTION 2. HEALTH HAZARD DATA

EMERGENCY OVERVIEW: Propylene is a flammable gas approximately 1½ times heavier than air. Inhalation: It has a very mild anesthetic effect; however, the major property is the exclusion of an adequate supply of Oxygen to the lungs. Contact with the rapidly evaporating liquid could cause frostbite or cryogenic "burns".

TIME WEIGHTED AVERAGE EXPOSURE LIMIT: Propylene is defined as a simple asphyxiant with an A4 (Not Classifiable as a Human Carcinogen) carcinogen rating (ACGIH 2004). ACGIH (2004) also indicates an intention to change the rating from a simple asphyxiant to a TWA of 500 Molar PPM. However, that change did not occur during 2005. OSHA 2004 has no listing for Propylene.

Oxygen levels should be maintained at greater than 19.5 Molar percent at normal atmospheric pressure (pO₂ >148 torr).

TOXICOLOGICAL PROPERTIES: Breathing high concentrations causes a very mild anesthetic effect. Frostbite effects are the change in the color of the skin to gray or white possibly followed by blistering. Propylene is not listed in the IARC, NTP or by OSHA as a carcinogen or potential carcinogen. Persons in ill health where such illness would be aggravated by exposure to Propylene should not be allowed to work with or handle this product.

RECOMMENDED FIRST AID TREATMENT: PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO PROPYLENE. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS AND BE COGNIZANT OF EXTREME FIRE AND EXPLOSION HAZARD.