

MATERIAL SAFETY DATA SHEET

(Approved by U.S. Department of Labor as "essentially similar" to Form L58-005-4)

for services welding

Propylene
PRODUCT

SECTION I-IDENTIFICATION OF PRODUCT

MANUFACTURER'S NAME EXXON CHEMICAL COMPANY U.S.A.		EMERGENCY TELEPHONE NO. (713) 656-3600
ADDRESS (Number, Street, City, State and ZIP Code) 1333 W. LOOP S., HOUSTON, TEXAS 77027		
TRADE NAME Propylene	CHEMICAL NAME Propylene, propene	
CHEMICAL FAMILY Olefin	CHEMICAL FORMULA C₃H₆	

SECTION II-HAZARDOUS COMPONENTS OF MIXTURES

The precise composition of this product is proprietary information. A more detailed disclosure will be provided by Exxon Medical or Industrial Hygiene personnel to qualified Medical or Industrial Hygiene personnel as privileged information upon request in case of need for specific treatment.

Not applicable to High Purity Chemicals

SECTION III-TYPICAL PHYSICAL DATA

APPEARANCE AND ODOR Colorless gas under normal conditions	SPECIFIC GRAVITY 0.522 @ 15.5/15.5°C (60/60°F)
BOILING POINT (°F) -48°C (-54°F)	PERCENT VOLATILE (BY VOLUME) 100
VAPOR PRESSURE 10 atm @ 20°C (68°F)	EVAPORATION RATE (N-BUTYL ACETATE = 1) Not available
VAPOR DENSITY (AIR 1) 1.46	
SOLUBILITY IN WATER 0.018 wt% @ 38°C (100°F)	

SECTION IV-FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method) TCC: -108°C (-162°F)	FLAMMABLE LIMITS (PERCENT BY VOLUME)	LoI	UeI
		2.0	11.1

FIRE EXTINGUISHING MEDIA
Stop flow of gas if possible. CO₂, dry chemical, water fog.

SPECIAL FIRE FIGHTING PROCEDURES Do not extinguish flames due to possibility of explosive re-ignition. Shut off source of fuel if possible and allow fire to burn out. Extinguish small residual fires with dry chemical. Wear self-contained breathing apparatus. Use water spray to cool exposed surfaces.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Extremely hazardous. Material will ignite at ambient temperatures and can be expected to form flammable mixture upon release to the atmosphere.

HAZARDOUS PRODUCTS OF COMBUSTION
None - except carbon monoxide

THIS INFORMATION RELATES ONLY 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 Exxon Chemical Company U.S.A. knowledge and belief, accurate and reliable as of the date indicated.

HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE.

Propylene

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE No OSHA standard established. Exxon Chemical Environmental Health Division recommendation is 1000 ppm.

EFFECTS OF OVEREXPOSURE Moderate concentration in air causes dizziness, drowsiness and unconsciousness. Contact with liquified propylene will cause "cold burn".

EMERGENCY AND FIRST AID PROCEDURES Remove victim to fresh air. Call a physician promptly. If breathing is irregular or has stopped, administer artificial respiration. In case of "cold burn", immediately place affected area in water at 37.5°C (99.6°F) and keep at this temp. until circulation returns.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID Keep away from oxygen and oxidizing materials.
	STABLE	X	

INCOMPATIBILITY (MATERIALS TO AVOID FOR PURPOSES OF TRANSPORT, HANDLING & STORAGE ONLY)
Concentrated mineral acids, halogenated compounds, nitrogen dioxide, oxidizing agents, molten sulfur.

HAZARDOUS DECOMPOSITION PRODUCTS
None.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Eliminate all ignition sources. Keep people away. Shut off leak if possible without risk. Prevent liquid from entering sewers or low areas. Warn occupants downwind of explosion hazard. Advise police if liquids enter sewer or water course.

WASTE DISPOSAL (INSURE CONFORMITY WITH LOCAL DISPOSAL REGULATIONS) All equipment should be depressured/blowdown/vented to a burning flare. If vapor must be vented to atmosphere, the area must open and remote. Insure dissipation of gas below its lower explosive limit.

SECTION VIII - PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION Organic vapor canister or air-supplied mask.		
VENTILATION	LOCAL EXHAUST	SPECIAL ADEQUATE* ventilation
	MECHANICAL (General) Explosion-proof vent, equipment.	OTHER No smoking or open lights.
PROTECTIVE GLOVES	EYE PROTECTION	
OTHER PROTECTIVE EQUIPMENT SEE SECTION V		

SECTION IX - HANDLING AND STORAGE PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Keep away from heat, sparks and open flames. Protect against static electricity and lightnings. Protect against physical damage.
OTHER PRECAUTIONS
Use only with ADEQUATE* ventilation.

DATE OF ISSUE <input checked="" type="checkbox"/> NEW <input type="checkbox"/> October 1, 1977 <input type="checkbox"/> REVISED; SUPERSEDES	APPROVED BY <i>James W. Hammond</i> TITLE: Director, Industrial Hygiene
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