

# MATERIAL SAFETY DATA SHEET

Finished Product



**Date-Issued:** 12/16/2002  
**MSDS Ref. No:** ms1641-B  
**Date-Revised:** 12/23/2002  
**Revision No:** New MSDS

Solvon IP

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Solvon IP  
**GENERAL USE:** Azeotropic Cleaner  
**PRODUCT DESCRIPTION:** Stabilized n-Propyl Bromide Azeotrope  
**PRODUCT CODE:** 1641/CAN-Q, G, 5G, 54G

### MANUFACTURER

Techspray, L.P.  
1001 N.W. 1st Street  
P.O. Box 949  
Amarillo, TX 79107  
**Contact:** Chemtrec  
**Product Stewardship:** 1-800-858-4043

### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC (U.S.):** (800) 424-9300  
**CANUTEC:** (613) 996-6666  
**Emergency Phone:** 1-800-858-4043

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt.%</u>	<u>CAS#</u>	<u>EINECS#</u>
n-Propyl Bromide	>93	106-94-5	
2-Propanol	<10	67-63-0	200-661-0
1,2-Epoxybutane	<1	106-88-7	

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS:** Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. Causes skin irritation. Harmful if swallowed.

### POTENTIAL HEALTH EFFECTS

**EYES:** Causes eye irritation.

**SKIN:** Contact causes severe skin irritation and possible burns.

**SKIN ABSORPTION:** Skin absorption can occur.

**INGESTION:** Ingestion of large amounts may produce abdominal pain, nausea and vomiting. Swallowing small amounts is not likely to produce harmful effects.

**INHALATION:** Prolonged or excessive inhalation may cause respiratory tract irritation.

## **SIGNS AND SYMPTOMS OF OVEREXPOSURE**

**EYES:** Symptoms of overexposure include: stinging, tearing, redness and pain.

**SKIN:** Prolonged exposure causes redness, pain, drying and cracking of the skin.

**INGESTION:** For large amounts; abdominal pain, nausea and vomiting.

**INHALATION:** High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis and loss of consciousness).

**CHRONIC:** 2-butoxyethanol can be absorbed through the skin. Prolonged exposure by this route may have effects on the hematopoietic system, resulting in blood disorders.

**TARGET ORGAN STATEMENT:** Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.

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## **4. FIRST AID MEASURES**

**EYES:** Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

**SKIN:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

**INGESTION:** Aspiration hazard. If swallowed, vomiting may occur spontaneously, but do not induce. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Call a physician immediately.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

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## **5. FIRE FIGHTING MEASURES**

**FLASHPOINT AND METHOD:** Not Flammable

**FLAMMABLE LIMITS:** 3.0 to 8.0

**AUTOIGNITION TEMPERATURE:** Not Established

**EXTINGUISHING MEDIA:** Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, Carbon dioxide, and hydrogen bromide.

**FIRE FIGHTING PROCEDURES:** Evacuate area and fight fire from a safe distance.

**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**LARGE SPILL:** Clean up spills immediately, observing precautions in Protective Equipment section.

**GENERAL PROCEDURES:** Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on adsorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including vapors, have been removed thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth, gravel, etc. as necessary and place in closed containers for disposal.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Wash thoroughly after handling. Use only in a well ventilated area. Store in a cool dry place.

**HANDLING:** Avoid prolonged or repeated contact with skin.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES:

#### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

	<u>EXPOSURE LIMITS</u>					
	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>Supplier OEL</u>	
	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>
n-Propyl Bromide	<b>TWA</b>	NE		NE <sup>[1]</sup>	25 <sup>[2]</sup>	
2-Propanol	<b>TWA</b>	400	980	400	983	NL <sup>[3]</sup> NL
	<b>STEL</b>	500	1225	500	1230	NL NL
1,2-Epoxybutane	<b>TWA</b>		400			

#### OSHA TABLE COMMENTS:

1. NOT ESTABLISHED
2. Limit established by supplier
3. NL = Not Listed

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety glasses with side shields (or goggles) and a face shield.

**SKIN:** The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection.

Buna  
Butyl

Natural Latex  
Neoprene  
Solvex  
Butyl Rubber  
Solvex

**RESPIRATORY:** NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

**WORK HYGIENIC PRACTICES:** Wash hands before eating and wash before reuse.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**ODOR:** Characteristic odor.

**APPEARANCE:** Clear, Colorless liquid

**PERCENT VOLATILE:** 100 at 20°C (68°F)

**VAPOR PRESSURE:** 139 mmHg at 25°C (70°F)

**BOILING POINT:** to 68°C (154°F)

**SOLUBILITY IN WATER:** <1 at 25°C (70°F)

**EVAPORATION RATE:** >1 (H<sub>2</sub>O=1)

**SPECIFIC GRAVITY:** 1.25 @ 20°C/20°C

**(VOC):** 1333 g/L (non-exempt VOC)

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## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Stable. However, may decompose if heated.

**STABILITY:** Stable.

**POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon Dioxide and carbon Monoxide may form when heated to decomposition.

**INCOMPATIBLE MATERIALS:** Metals. Acidic conditions. Oxidizing materials.

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## 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** Mixture is a moderate eye irritant.

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## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** Isopropyl alcohol has a high biochemical oxygen demand and a

potential to cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism, a low potential to affect the germination of some plants, a high potential to biodegrade (low persistence) with unacclimated microorganisms from activated sludge.

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## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Federal, State, and Local laws governing disposal of materials can differ. Ensure compliance with proper authorities before disposal.

**GENERAL COMMENTS:** Dispose of in a manner consistent with federal, state, and local regulations.

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## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Nonhazardous

**UN/NA NUMBER:** N/A

**PACKING GROUP:** N/A

### AIR (ICAO/IATA)

**PROPER SHIPPING NAME:** Nonhazardous

**UN/NA NUMBER:** M/A

**PACKING GROUP:** N/A

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## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**313 REPORTABLE INGREDIENTS:** 2-propanol (CAS #67-63-0)

**TITLE III NOTES:** Not listed as an Extremely Hazardous Substance.

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

**TSCA STATUS:** All components of this product are either listed or exempt from listing in the TSCA inventory.

### CANADA

**WHMIS (WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM):** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**CANADA INGREDIENT DISCLOSURE LIST:** CAS# 67-63-0 is listed on Canada's Ingredient Disclosure List.

**DOMESTIC SUBSTANCE LIST (INVENTORY):** All components of this product are listed on the Canadian DSL.

**CALIFORNIA PROPOSITION 65:** This product does not contain any chemicals known to the State of California to cause cancer.

## 16. OTHER INFORMATION

**APPROVED BY:** Pierce A. Pillon    **TITLE:** Chemist

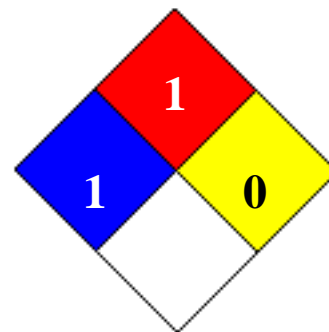
**PREPARED BY:** D.S. Morelos

**REVISION SUMMARY** New MSDS

### HMIS RATING

<b>HEALTH:</b>		<b>1</b>
<b>FLAMMABILITY:</b>		<b>1</b>
<b>PHYSICAL HAZARD:</b>		<b>0</b>
<b>PERSONAL PROTECTION:</b>		

### NFPA CODES



**DATA SOURCES:** Code of Federal Regulations (CFR)  
The Sigma-Aldrich Library of Regulatory and Safety Data  
OSHA Hazard Communication Standard (29CFR1910.1200)  
Various Federal, State and Local Regulations

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