

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : **Volatile Solvent**

Product category : Commercial cleaning chemical for professional use.

Product usage : A residue-free, rapidly drying solvent spotter for tough petroleum-based stains in carpet and upholstery. Removes grease, oil, tar, gum, lipstick, ink, nail polish, etc. No dilution required.

Manufacturer : **Racine Industries, Inc.** Telephone:
1405 16th Street 1-262-637-4491
Racine, WI 53403 USA 1-800-558-9439 (8am-4:30pm CST)

Emergency contacts after hours : Geoff Rench: 1-262-632-2220
Geoff Greeley: 1-262-497-4158

2. HAZARDS IDENTIFICATION

OSHA/HCS status : This material is considered hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200 and EU CLP Regulation (EC) No. 1272/2008.

Hazard classifications :

Acute toxicity, oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/irritation	Category 2
Specific target organ toxicity, single exposure; Respiratory tract irritation	Category 3
Specific target organ toxicity, single exposure; Narcotic effects	Category 3
Carcinogenicity	Category 2
Reproductive toxicity	Category 1A, 1B
Specific target organ toxicity, repeated exposure	Category 2
Hazardous to the aquatic environment, Chronic hazard	Category 3

GHS LABEL ELEMENTS

Hazard pictograms : Exclamation Point (GHS07) Health Hazard (GHS08)



Signal word : **DANGER**

Hazard statements :

- Harmful if swallowed. (H302)
- Causes skin irritation. (H315)
- Causes serious eye irritation. (H319)
- May cause respiratory irritation. (H335)
- May cause drowsiness or dizziness. (H336)
- Suspected of causing cancer. (H351)
- May damage fertility or the unborn child. (H360)
- Causes damage to organs through prolonged or repeated exposure. (H373)
- Harmful to aquatic life with long-lasting effects (H412)

2. HAZARDS IDENTIFICATION (cont.)

PRECAUTIONARY STATEMENTS

- Prevention** : **Obtain special instructions before use.** (P201)
Do not handle until all safety precautions have been read and understood. (P202)
 Keep away from heat/sparks/open flames/hot surfaces. No smoking. (P210)
 Keep container tightly closed. (P233)
 Do not breathe fumes/mist/vapor/spray. (P260)
 Wash hands thoroughly after handling. (P264)
 Do not eat, drink, or smoke when using this product. (P270)
 Use only outdoors or in a well-ventilated area. (P271)
 Avoid release to the environment. (P273)
 Wear protective gloves/protective clothing/eye protection/face protection. (P280)
- Response** : Wash contaminated clothing before reuse. (P362)
- IF SKIN irritation occurs: Get medical advice/attention. (P332+313)
- IF SWALLOWED: Call a POISON CENTER or doctor/physician IF you feel unwell. (P301+312) Rinse mouth. (P330)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. (P305+351+338)
 If eye irritation persists, get medical advice/attention. (P337+313)
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+340)
 Call a POISON CENTER or doctor/physician if victim feels unwell. (P312)
- If exposed or concerned, get medical advice/attention. (P308+313)
 Get medical advice/attention if you feel unwell. (P314)
- Storage** : Store in a well ventilated place. (P403)
 Keep container tightly closed. (P233)
 Store locked up. (P405)
- Disposal** : Dispose of in accordance with local, state, and federal laws. (P501)
- Hazards not otherwise classified (HNOC)** : None known.

3. COMPOSITION / INGREDIENTS

Hazardous ingredients	CAS#	EC#	Weight	GHS Hazard Class (see Secs. 2, 16)
n-Propyl bromide (stabilized)	106-94-5	203-445-0	>90%	Those assigned to this product
1,2-Butylene oxide	106-88-7	203-438-2	<2%	H225, H302, H312, H315, H319, H332, H335, H351, H402, H412

4. FIRST-AID MEASURES

- Skin contact** : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Thoroughly wash contaminated clothing before reuse. If irritation occurs, get medical advice/attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if victim feels unwell. If breathing has stopped, supply artificial respiration. If breathing is difficult, give oxygen.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. If eye irritation persists, get medical advice/attention.
- Ingestion** : Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Keep warm.

5. FIRE-FIGHTING MEASURES

- Flash point** : Noncombustible (by ASTM D-56 TC; D-92 COC; D-93 TCC).
- Extinguishing media** : Dry chemical, chemical foam, or carbon dioxide as dictated by surrounding circumstances.
- Unusual fire/explosion hazards** : In fires, toxic and corrosive gases may be released. Vapor will form a flammable mixture in a narrow concentration range of 3.0%-9.0% by volume in air.
- Special firefighting procedures** : Wear NIOSH-approved self-contained breathing apparatus (set on positive pressure mode) and protective clothing and eyewear.

6. ACCIDENTAL RELEASE MEASURES

- Spill and leak procedures** : Contain spillage or leakage with dikes or absorbent material to prevent migration into sewers or waterways. Absorb spill with an inert material and place in a chemical waste container for disposal. For large spills, evacuate and ventilate the area. Wear self-contained breathing apparatus and recommended personal protective equipment. Observe government regulations.

7. HANDLING AND STORAGE

- Handling procedures** : Minimize introduction of water or moisture into the product.
- Storage procedures** : KEEP OUT OF REACH OF CHILDREN.
Store in a ventilated, cool, dry area. Store in original container only. Keep container tightly closed when not in use.

8. PERSONAL PROTECTION / EXPOSURE CONTROLS

<u>Ingredient name</u>	<u>ACGIH TLV</u>	<u>M-TWA</u>	<u>OSHA</u>
N-propyl bromide (stabilized)	10 ppm	325 ppm	Not established
1,2-butylene oxide	Not established	Not established	Not established

- Engineering controls** : Use general ventilation. Dilution ventilation is necessary for enclosed spaces.

Personal protective equipment

- Skin protection** : Chemical-resistant gloves such as nitrile, PVA or viton. DO NOT use natural rubber gloves.
- Eye protection** : Wear safety glasses or a full face shield.
- Respiratory protection** : If ventilation is not adequate, use a NIOSH-approved respirator with organic vapor cartridge.
- Additional advice** : None.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear liquid; colorless	Odor	: Mildly sweet
pH	: Not applicable	VOC content	: None
Specific gravity	: 1.26-1.31	Water solubility	: Negligible
Flash point	: None	Vapor density	: 4.3
Vapor pressure	: 139 mm Hg @ 25°C	(relative; air=1)	

10. STABILITY AND REACTIVITY

- Chemical stability** : Stable under normal conditions.
- Conditions to avoid** : Open flame, electric arc, other high-energy ignition sources. Prolonged contact with free water may result in diminished stabilizer and corrosion.
- Incompatibility** : Strong alkalis, oxidizers, bases, reactive metals, natural rubber
- Hazardous decomposition** : Thermal decomposition produces carbon monoxide, carbon dioxide, and hydrogen bromide.
- Hazardous polymerization** : Will not occur.

11. TOXICOLOGICAL INFORMATION

n-Propyl Bromide

- LD₅₀, Oral, Rat : >2,000 mg/kg
- LD₅₀, Dermal, Rat : >2,000 mg/kg
- LC₅₀, Inhalation, Rat : 72,306 mg/m³
- Chronic toxicity : Chronic or prolonged overexposure may cause adverse effects to the liver, kidneys, reproductive system, and central nervous system.
- Reproductive, Male : BMDL of reduced sperm motility F0 at 282 ppm (inhalation, rat*)
- Female : LOAEL of increased estrous cycle length at 350 ppm (inhalation, rat*)
*US EPA SNAP proposal conclusions based on outcome of Wil (2001).
- Mutagenicity : Not mutagenic by the Ames Test
- Carcinogenicity, IARC : Not listed
- ACGIH : A3 – animal carcinogen with unknown relevance to humans.
- Teratogenicity : NOEL is 100 ppm for maternal and fetal toxicity and 996 ppm for teratogenicity (inhalation, rat, 6 hr/day, gestation day 6-19)

1,2-Butylene Oxide

- LD₅₀, Oral, Rat : 1,180 mg/kg
- LD₅₀, Dermal, Rabbit : 1,760 mg/kg
- LC₅₀, Inhalation, Rat : 6,300 mg/m³ (4 hrs)
- Carcinogenicity, IARC : 2B

Symptoms of Overexposure

- Immediate (acute) effects** : Drowsiness, dizziness, muscular incoordination, respiratory depression
- Delayed effects** : Adverse effects to the liver, respiratory system, kidneys, reproductive system, and central nervous system.

12. ECOLOGICAL INFORMATION

Ecotoxicological information

- Ozone Depletion Potential (ODP)**: The ODP of n-propyl bromide has been determined to be in the range of 0.006-0.013.
- Aquatic Toxicity** : LC₅₀ 23.3 mg/L (rainbow trout, 96 hr); EC₅₀ 99.3 mg/L (Daphnia magna, 48 hr)

Environmental Fate

- Mobility** : Due to low affinity to soil and sediment, expected to be mobile in soil.
- Persistence & degradability** : Not readily biodegradable. n-Propyl bromide was shown to degrade in water via hydrolysis with a half-life of 562 hours (23.4 days).
- Bioaccumulative potential** : Predicted BCFs are significantly below 2000, indicating a negligible potential for bio-accumulation or subsequent biomagnification in the food chain.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations. DO NOT flush into sanitary sewer or waterways.

14. TRANSPORT INFORMATION

	DOT (Domestic Surface)	IMO/IMDG (Ocean)	ICAO/IATA (Air)
UN Number	: Not applicable.	Not applicable.	Not applicable.
UN proper shipping name	: Cleaning solvent mixture.		
Transport hazard class(es)	DOT Hazard Class: N/A DOT Label: N/A	IMDG: N/A Sub Class: N/A	Air Class: N/A
Packing group	: Not applicable.	Not applicable.	Not applicable.
Environmental Hazards			
IMDG Marine Pollutant	: No.		
Special precautions	: No further information.		

15. REGULATORY INFORMATION

Inventory status

USA (TSCA) : Listed
 Canada (DSL) : Listed
 Europe (EINECS/ELINCS) : Listed
 Japan (ENCS) : Listed
 Australia (AICS) : Listed
 Korea (ECL) : Listed
 Philippines (PICCS) : Listed
 China (IECSC) : Listed

Additional information

SARA Title III : The following components are subject to the reporting requirements of section 313 of SARA Title III: 1,2-butylene oxide (CAS 106-88-7).

CERCLA Reportable Quantities : RQ of 100 lbs for 1,2-butylene oxide (CAS 106-88-7).
 Note that an RQ of 100 lbs at this component's composition weight percentage requires approx. 1,500 gallons of this product to reach the threshold.

16. OTHER INFORMATION

HMIS® (Hazardous Materials Identification System)	
Health	2
Flammability	1
Physical Hazard	0
Personal protective equipment (PPE): (safety glasses, gloves)	B

0 = not significant, 1 = slight, 2 = moderate, 3 = serious, 4 = severe, * = chronic

GHS Hazard Class definitions from section 3:

H225 : Highly flammable liquid and vapor.
 H302 : Harmful if swallowed.
 H312 : Harmful in contact with skin.
 H319 : Causes serious eye irritation.
 H332 : Harmful if inhaled.
 H335 : May cause respiratory irritation.
 H351 : Suspected of causing cancer.
 H402 : Harmful to aquatic life.
 H412 : Harmful to aquatic life with long-lasting effects.

Von Schrader Company (VS) furnishes the data contained here in good faith at the customer's request without liability or legal responsibility to the same whatsoever. No warranty or guarantee, expressed or implied, is made with respect to such data nor does VS grant permission, recommendation, or inducement to infringe any patent whether owned by VS or others. The data is offered solely for your information and consideration. As conditions of use are beyond Von Schrader's control, user assumes all responsibility and risk.