

**BREWER SCIENCE INC.  
SAFETY DATA SHEET**

This Safety Data Sheet has been prepared to comply with the EC Directive, Canadian WHMIS and the OSHA Hazard Communication Standard.

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION  
AND THE COMPANY/UNDERTAKING**

**Product Name:** ProTEK® PSB Primer

**Manufacturer:** Brewer Science, Inc.  
2401 Brewer Drive  
Rolla, MO 65401

**Information Phone Number:** (573) 364-0300

**Fax:** (573) 368-3318

**Email:** msds@brewerscience.com

**Emergency Phone Number:**

Chemtrec Domestic North America: 800-424-9300

Chemtrec International: 703-527-3887

**SDS Date of Preparation:** 9/21/10

**Product Use:** Adhesion Promoter Primer

**SECTION 2: HAZARDS IDENTIFICATION**

Liquid with a mild odor.

**EMERGENCY OVERVIEW:** Flammable liquid and vapor. May cause eye, skin, and respiratory irritation. May cause headache, dizziness, nausea and other symptoms of central nervous system depression.

**EU Preparation Classification (1999/45/EC):** Flammable Irritant (Xi) R10, R36

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS# / EINECS#	%	EU Classification (67/548/EEC)
Propylene glycol n-propyl ether (PnP)	1569-01-3 / 216-372-4	65-75	Xi R10, R36
Additive	Proprietary	<0.1	Xi, R10, R38, R41
Catalyst	Proprietary	<0.5	C R10, R35
Coupling Agent	Proprietary	<2	Xi R38, R41
Water	7732-18-5 / 231-791-2	25-35	No EU Classification or R phrase

See Section 16 for further information on EU Classification.

**SECTION 4: FIRST AID MEASURES**

**Eye:** Rinse thoroughly with water for at least 15 minutes, holding the eye lids open to be sure the material is washed out. Get immediate medical attention.

**Skin:** Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before re-use.

**Inhalation:** Remove victim to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. Keep the victim calm and warm. Get immediate medical attention.

**SECTION 5: FIRE FIGHTING MEASURES**

**Extinguishing Media:** Use water fog or spray, alcohol foam, carbon dioxide or dry chemical. Do not use direct water stream.

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**Special Fire Fighting Procedures:** Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

**Unusual Fire Hazards:** Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Vapors may form explosive mixtures with air in confined areas. Application of direct water stream to burning liquid may cause boilover or steam eruption. Spills on hot fibrous insulation may result in spontaneous combustion.

**Hazardous Decomposition Products:** Oxides of carbon and unknown materials.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Spill:** Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed. Ventilate area. Cover with an inert absorbent material and collect into an appropriate container for disposal. Report spills and releases as required to appropriate authorities.

#### SECTION 7: HANDLING AND STORAGE

**Handling:** Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Always wear impervious gloves, chemical safety goggles and protective clothing when handling this material. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use.

**Storage:** Store in a cool, dry, well-ventilated location away from incompatible materials. Keep containers closed when not in use.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	Exposure Limits
Propylene glycol n-propyl ether	None Established
Additive	None Established
Catalyst	10 ppm TWA OSHA PEL 10 ppm TWA ACGIH TLV, 15 ppm STEL 10 ppm TWA DFG MAK 10 ppm TWA EU IOEL
Coupling Agent	None Established
Water	None Established

**Ventilation:** Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits. Use explosion proof electrical equipment and wiring where required.

**Respiratory Protection:** If needed, an approved respirator with organic vapor cartridges may be used. For higher exposures, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**Skin Protection:** Impervious gloves are recommended. Based on available test data butyl rubber gloves are suggested. Contact your glove supplier for selection assistance.

**Eye Protection:** Chemical safety goggles recommended.

**Other Protective Equipment:** Impervious clothing is required to prevent skin contact and contamination of personal clothing. An eye wash facility and safety shower should be available in the work area.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance and Odor:** Liquid with a solvent odor.

**pH:** Not available

**Boiling Point:** 149°C (PnP)

**Vapor Pressure:** 1.5 mm Hg @ 20°C (PnP)

**Vapor Density:** Not available

**Flash Point:** 48°C (118°F) (PnP)

**Specific Gravity:** Not available

**Melting Point:** Not Applicable

**Water Solubility:** Partially Soluble

**Evaporation Rate:** Not available

**Flammable Limits:** LEL: 1.1 vol % (PnP)  
UEL: Not determined

#### SECTION 10: STABILITY AND REACTIVITY

**Stability:**      **Stable:** X      **Unstable:**

**Incompatibility/Conditions to Avoid:** Strong oxidizing agents, acids and bases. Keep away from heat, sparks, flames and other sources of ignition.

**Hazardous Decomposition Products:** Combustion will produce oxides of carbon and unknown materials.

**Hazardous Polymerization:**    **May Occur:**    **Will not occur:** X

#### SECTION 11: TOXICOLOGICAL INFORMATION

##### Potential Health Effects:

**Eye:** May cause moderate eye irritation. Corneal injury is possible.

**Skin:** May cause irritation or burns with prolonged or repeated exposure. Repeated contact may cause drying or flaking of the skin.

**Inhalation:** Inhalation of vapors, mists, or aerosols may cause nose and throat irritation with the possibility of central nervous system depression. Symptoms of central nervous system depression include headache, dizziness, drowsiness, nausea and unconsciousness.

**Ingestion:** Swallowing may cause gastrointestinal irritation and central nervous system depression with symptoms similar to those described under inhalation.

**Chronic Hazards:** Chronic exposure may cause kidney or liver effects based on studies with laboratory animals.

**Carcinogen Status:** None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, ACGIH or the EU Dangerous Substance Directive.

**Medical Conditions Aggravated by Exposure:** Pre-existing skin diseases.

##### Acute Toxicity Values:

Propylene glycol n-propyl ether: Oral rat LD50 - 2504 mg/kg; Skin rabbit LD50 - 3550 gm/kg

Additive: No toxicity data is available

Catalyst: Oral rat LD50: 3310 mg/kg; Skin rabbit LD50 1060 mg/kg, Inhalation rat LC50 11.4 mg/L

Coupling Agent: No toxicity data is available

Water: No toxicity data is available

#### SECTION 12: ECOLOGICAL INFORMATION

Propylene glycol n-propyl ether: 96 hr/LC50, fathead minnow - 3,400 mg/l, 48 hr/LC50 Daphnia magna -3,600 mg/l

Catalyst: 96 hr LC50 fathead minnow 88 ppm; 24 hr EC50 daphnia magna 6,000 mg/L

Coupling Agent: 96 hr LC50 fathead minnow 3,400 mg/L, LC50 daphnia magna 3,600 mg/L.

#### SECTION 13: DISPOSAL INFORMATION

Dispose in accordance with all local, state and federal regulations.

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#### SECTION 14: TRANSPORT INFORMATION

**DOT Shipping Name:** Flammable Liquid, n.o.s. (Contains Propylene glycol n-propyl ether)      **ERG #127**  
**DOT Hazard Class:** 3, PG III  
**UN Number:** UN1993  
**DOT Labels Required (49CFR172.101):** Flammable Liquid (See 173.120 for domestic shipment exemption for combustible liquids)  
**Hazardous Substance (49CFR172.101):** None  
**Reportable Quantity:** N/A

**IATA Shipping Name:** Flammable Liquid, n.o.s. (Contains Propylene glycol n-propyl ether)  
**IATA Hazard Class:** 3, PG III  
**UN Number:** UN1993  
**IATA Hazard Labels Required:** Flammable Liquid

#### SECTION 15: REGULATORY INFORMATION

##### U.S. FEDERAL REGULATIONS:

**CERCLA 103 Reportable Quantity:** This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state and federal regulations.

##### SARA TITLE III:

**Hazard Category for Section 311/312:** Acute Health, Chronic Health, Fire Hazard

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:      None

**Section 302 Extremely Hazardous Substances (TPQ):** None


**EPA Toxic Substances Control Act (TSCA) Status:** This product contains a substance(s) that is not listed on the EPA TSCA inventory. A low volume exemption notice has been granted. This exemption restricts the use of this product to Microelectronic Manufacturing Applications.

##### STATE REGULATIONS:

**California Proposition 65:** This product contains the following substances known to the State of California to cause cancer: aniline <0.02%.

##### INTERNATIONAL REGULATIONS:

##### European Community Labeling:

	R10 Flammable R36 Irritating to eyes. S25 Avoid contact with eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S51 Use only in well ventilated areas.
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Irritant

#### SECTION 16: OTHER INFORMATION

**HMIS Ratings:** Health - 2      Flammability - 2      Reactivity - 0  
**NFPA Ratings:** Health - 2      Flammability - 2      Reactivity - 0

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**SDS Revision History:**

9/21/10: New SDS.

11/2/10: Complete review of SDS. Converted SDS to a Universal GHS format.

8/25/11: Section 2: GHS Classification, Label Elements, Precautionary Phrases, Section 3 percentages

2/10/12: Section 3: Formulation.

**EU Classes and Risk Phrases for Reference (See Sections 2 and 3):**

C Corrosive

Xi Irritant

R10 Flammable

R35 Causes severe burns.

R36 Irritating to eyes.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

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This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Brewer Science, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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