

**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® B3-25

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: 8/28/07

Product Use: Protective Coating

SECTION 2: HAZARDS IDENTIFICATION

Liquid with a sweet 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. May be harmful if inhaled.

EU Preparation Classification (1999/45/EC): Harmful (Xn) R10, R20, R36

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS# / EINECS#	%	EU Classification (67/548/EEC)
Ethyl-3-ethoxypropionate	763-69-9 / 212-112-9	30-40	Xi R10, R36
5-methyl-2-hexanone (Methyl Isoamyl Ketone, MIAK)	110-12-3 / 203-737-8	30-40	Xn R10, R20
Polymer Solids	Proprietary	20-30	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 AND EXPLOSION DATA

Prepared By:	Safety & Environmental Units
Approved By:	Safety & Environmental Units
Issue/Revision Date	F.7.6.3182.D / 12/11/09

Extinguishing Media: Use water fog or spray, universal foam, carbon dioxide or dry chemical.

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.

Hazardous Decomposition Products: Oxides of carbon and nitrogen 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
Ethyl-3-ethoxypropionate	None Established
5-methyl-2-hexanone (Methyl Isoamyl Ketone, MIAK)	50 ppm TWA ACGIH TLV 100 ppm TWA OSHA PEL 10 ppm TWA DFG MAK 20 ppm TWA UK WEL, 100 ppm STEL UK WEL 20 ppm EU-TWA
Polymer Solids	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, 4H or Silver Shield gloves are suggested.

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

Appearance and Odor: Liquid with a sweet odor.

pH: Not available

Specific Gravity: Not available

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Boiling Point: 154-170°C
Vapor Pressure: 4.5 mmHg @ 20°C (MIAK)
Vapor Density: 3.9 (MIAK)
Flash Point: 36°C (96°F) (MIAK)

Melting Point: Not Applicable
Water Solubility: Partially Soluble
Evaporation Rate: Not available
Flammable Limits: LEL: 1.0 vol % (MIAK)
UEL: 8.2 vol % (MIAK)

SECTION 10: STABILITY AND REACTIVITY

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

Incompatibility/Conditions to Avoid: Strong oxidizing agents. 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 mild to moderate eye irritation. Corneal injury is possible.

Skin: May cause irritation with prolonged or repeated exposure. 5-Methyl-2-hexanone may be absorbed through the skin causing symptoms of headache, dizziness, nausea, and drowsiness.

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 absorption may cause kidney or liver damage based on studies with laboratory animals.

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

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

Acute Toxicity Values:

Ethyl 3-ethoxypropionate: Oral rat LD50 - 3200 mg/kg; Skin rabbit LD50 - 10 mL/kg

5-methyl-2-hexanone: Oral rat LD50 - 3200 mg/kg; Skin rabbit LD50 - 10mL/kg; Inhalation rat LC50 - 3813 ppm/6 hrs

Polymer Solids: No toxicity data is available

SECTION 12: ECOLOGICAL INFORMATION

Ethyl 3-ethoxypropionate: LC50 Pimephales promelas: 96 hr 50 mg/L

5-Methyl-2-Hexanone: LC50 Fathead minnow: 159 mg/L (flow-through)

SECTION 13: DISPOSAL INFORMATION

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

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Resin Solution, Flammable

ERG #127

DOT Hazard Class: 3, PG III

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UN Number: UN1866
 DOT Labels Required (49CFR172.101): Flammable Liquid
 Hazardous Substance (49CFR172.101): None
 Reportable Quantity: N/A

IATA Shipping Name: Resin Solution, Flammable
 IATA Hazard Class: 3, PG III
 UN Number: UN1866
 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, 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: All of the components of this product are listed on TSCA.

STATE REGULATIONS:

California Proposition 65: This product contains the following substances known to the State of California to cause cancer: Formaldehyde <0.015%.

INTERNATIONAL REGULATIONS:

European Community Labeling Classification:

 Harmful	R10 Flammable R20 Harmful by inhalation. 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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SECTION 16: OTHER INFORMATION

HMIS Ratings: Health - 2 Flammability - 3 Reactivity - 0

NFPA Ratings: Health - 2 Flammability - 3 Reactivity - 0

SDS Revision History:

8/28/07: New SDS
 2/8/08: Updated formulation, updated wording for Carcinogen status and CERCLA, corrected wording for California Proposition 65.

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2/9/09: Added ACGIH to carcinogen status.

12/11/09: Updated UEL. Updated EU Classification for MIAK. Updated product EU classification. Updated CERCLA. Updated Unusual Fire Hazards in Section 5. Updated exposure limits. Updated California Proposition 65 statement. Updated Acute toxicity for Ethyl-3-ethoxypropionate. Added Ecological information for Ethyl-3-ethoxypropionate.

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

Xi Irritant

Xn Harmful

R10 Flammable

R20 Harmful by inhalation.

R36 Irritating 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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