

Material Safety Data Sheet

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

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MANUFACTURER:

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Issue Date: 09/25/2002

Transportation Emergency
Chemtrec: 800-424-9300

TRADE NAME:

BondPrep 4298 Primer

SECTION 2. INGREDIENTS

Ingredient	CAS No.	% by Wt.
CYCLOHEXANE	110-82-7	45 - 50
XYLENE	1330-20-7	25 - 35
ETHYL ALCOHOL	64-17-5	5 - 10
ETHYLBENZENE	100-41-4	5 - 10
ACRYLIC POLYMER (NJTS#04499600-5984P)	Trade Secret	1 - 5
CHLORINATED POLYETHYLENE	68609-36-9	1 - 5
ETHYL ACETATE	141-78-6	1 - 5
ISOPROPYL ALCOHOL	67-63-0	0.1 - 1

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Specific Physical Form: Liquid

Odor, Color, Grade: Amber colored, solvent odor

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Flammable liquid and vapor. Contains a chemical or chemicals which can cause cancer. May cause target organ effects.

POTENTIAL HEALTH EFFECTS

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

Prolonged or repeated exposure may cause:

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Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

May be absorbed through skin and cause target organ effects.

Inhalation:

Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May be absorbed following inhalation and cause target organ effects.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.

May be harmful or fatal if swallowed.

Chemical (Aspiration) Pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and may be fatal.

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure, above recommended guidelines, may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Central Nervous System (CNS) Effects: Signs/symptoms may include emotional or personality changes, lack of coordination, tremors and sensory loss.

Kidney Effects: Signs/symptoms may include reduced or absent urine production, increased serum creatinine, lower back pain, increased protein in urine, and increased blood urea nitrogen (BUN).

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

NOTE: This product contains ethanol. In IARC published Monograph No. 44, entitled, "Alcohol Drinking", the carcinogenicity of ethanol was determined based on chronic exposure to ethanol through human consumption of alcoholic beverages. This is not an expected effect during the foreseeable use of this product.

<u>Ingredient Class</u>	<u>C.A.S. No</u>	<u>Description.</u>	<u>Regulation</u>
ETHYL ALCOHOL	64-17-5	Group 1	International Agency for Research on Cancer
ETHYLBENZENE	100-41-4	Group 2B	International Agency for Research on Cancer

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SECTION 4. FIRST AID MEASURES

FIRST AID PROCEDURES:

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

NOTE TO PHYSICIANS:

Treatment for overexposure is symptomatic and supportive care.

SECTION 5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Autoignition temperature	No Data Available
Flash Point[Test Method: Open Cup]	Approximately -4 °F
Flammable Limits - LEL	Approximately 1 %
Flammable Limits - UEL	Approximately 6 %
OSHA Flammability Classification:	Class IB Flammable Liquid

EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

Unusual Fire and Explosion Hazards: Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Flammable liquid and vapor.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7. HANDLING AND STORAGE

HANDLING

Avoid eye contact with vapors, mists, or spray. Avoid breathing of vapors, mists or spray. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Avoid static discharge. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. No smoking while handling this material.

STORAGE

Keep container tightly closed. Store away from areas where product may come into contact with food or pharmaceuticals. Store away from heat. Keep container in well-ventilated area.

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SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers. Use in a wellventilated area. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection:

Avoid eye contact with vapors, mists, or spray.
The following eye protection(s) are recommended: Safety Glasses with side shields.

Skin Protection

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.
Gloves made from the following material(s) are recommended:
Fluoroelastomer (Viton).

Respiratory Protection

Avoid breathing of vapors, mists or spray.
Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Add Info
CYCLOHEXANE	ACGIH	TWA	100 ppm	
CYCLOHEXANE	OSHA	TWA	300 ppm	Table Z-1
ETHYL ACETATE	ACGIH	TWA	400 ppm	
ETHYL ACETATE	OSHA	TWA	400 ppm	Table Z-1
ETHYL ALCOHOL	ACGIH	TWA	1000 ppm	Table A4
ETHYL ALCOHOL	OSHA	TWA	1000 ppm	Table Z-1
ETHYLBENZENE	ACGIH	TWA	100 ppm	
ETHYLBENZENE	ACGIH	STEL	125 ppm	
ETHYLBENZENE	OSHA	TWA	100 ppm	Table Z-1A
ETHYLBENZENE	OSHA	STEL	125 ppm	Table Z-1A

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ISOPROPYL ALCOHOL	ACGIH	TWA	400 ppm	
ISOPROPYL ALCOHOL	ACGIH	STEL	500 ppm	
ISOPROPYL ALCOHOL	OSHA	TWA	400 ppm	Table Z-1A
ISOPROPYL ALCOHOL	OSHA	STEL	500 ppm	Table Z-1A
XYLENE	ACGIH	TWA	100 ppm	Table A4
XYLENE	ACGIH	STEL	150 ppm	Table A4
XYLENE	OSHA	TWA	100 ppm	Table Z-1A
XYLENE	OSHA	STEL	150 ppm	Table Z-1A

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SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9. PHYSICAL AND CHEMICAL DATA
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Specific Physical Form:	Liquid
Odor, Color, Grade:	Amber colored, solvent odor
General Physical Form:	Liquid
Autoignition temperature	No Data Available
Flash Point	Approximately -4 °F [Test Method: Open Cup]
Flammable Limits - LEL	Approximately 1 %
Flammable Limits - UEL	Approximately 6 %
Boiling point	170 °F - 280 °F
Vapor Density	Approximately 0.0043 g/ml [@ 100 °C]
Vapor Pressure	Approximately 68 mmHg [@ 25 °C]
Specific Gravity	Approximately 0.82
pH	Approximately 5.5
Melting point	Not Applicable
Solubility In Water	Approximately 10 %
Evaporation rate	Approximately 6.4 [Ref Std: XYLENE=1]
Hazardous Air Pollutants	34 - 36 % weight
Volatile Organic Compounds	Approximately 750 g/l
Percent volatile	Approximately 94 %
VOC Less H2O & Exempt Solvents	Approximately 755 g/l
Viscosity	30 - 40 centipoise

SECTION 10. STABILITY AND REACTIVITY DATA
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Stability: Stable.

Materials and Conditions to Avoid: Heat; Sparks and/or flames

Hazardous Polymerization: Hazardous polymerization will not occur.

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Hazardous Decomposition or By-Products

<u>Condition</u>	<u>Substance</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	During Combustion

SECTION 11. TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not Determined

CHEMICAL FATE INFORMATION

Not Determined

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.
Combustion products will include HCl. Facility must be capable of handling halogenated materials.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14. TRANSPORT INFORMATION

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact BondPro for more information.

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311/312 Hazard Categories:

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Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
CYCLOHEXANE	110-82-7	45 - 50
XYLENE	1330-20-7	25 - 35
ETHYLBENZENE	100-41-4	5 - 10

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<u>Ingredient</u> (Category if applicable)	<u>C.A.S. No</u>	<u>Regulation</u>	<u>Status</u>
CYCLOHEXANE	110-82-7	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable
ETHYL ACETATE	141-78-6	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable
ISOPROPYL ALCOHOL	67-63-0	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact BondPro Corporation for more information.

INTERNATIONAL REGULATIONS

Contact BondPro Corporation for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16. OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 3 Reactivity: 0 Special Hazards: None

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National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but

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also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes:
None

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