

SECTION 1 -- PRODUCT IDENTIFICATION

IDENTITY (Trade Name): 7921 Resin

FAMILY/CHEMICAL NAME: Modified Phenolic Two Step Resin

PRODUCT USE: Bonding agent.

MANUFACTURER/SUPPLIER: BORIDE Engineered Abrasives
2615 Aero Park Dr.
Traverse City MI 49686-9101

ORIGINAL ISSUE DATE: November 2012

TELEPHONE NUMBER: (231) 929-2121

24-HOUR EMERGENCY NUMBER: (231) 922-1959

SECTION 2 – HAZARDS IDENTIFICATION

PRIMARY ROUTES OF EXPOSURE: Dust generated during use may be inhaled or come in contact with skin or eyes.

POTENTIAL HEALTH EFFECTS:

ACUTE: Eyes: Can cause moderate to severe irritation, reddening and swelling of the conjunctiva.

Skin: Mild irritation redness, itchiness, dermatitis with prolonged contact.

Inhalation (Breathing): Nasal and respiratory irritation.

Ingestion (Swallowing): Irritation of mouth and throat; can cause moderate to severe GI tract irritation.

CHRONIC: Prolonged contact may cause dermatitis, skin darkening, kidney, liver, neurological and heart effects. Repeated breathing of dust or vapors may reduce lung function.

MEDICAL CONDITION AGGRAVATED BY EXPOSURE: Dermatitis.

NFPA RATINGS: Health: 1; Flammability: 1; Reactivity: 1

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>MATERIAL</u>	<u>CAS #</u>	<u>WEIGHT %</u>	<u>PEL</u>
Formaldehyde polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and phenol	40216-08-8	80 - 94%	N/E
Hexamethylenetetramine	100-97-0	7 – 11%	NE
Phenol	108-95-2	1 – 3%	5 ppm

N/E = not established

SECTION 4 – FIRST AID MEASURES

EYES: Flush eyes with water for 15 minutes lifting upper and lower lids occasionally. Seek medical attention if irritation or pain persists.

SKIN: Thoroughly wash affected area with soap and water and isolate from exposure. If irritation or rash persists, seek medical attention.

INHALATION: If symptoms of pulmonary involvement develop (coughing, sneezing, shortness of breath) remove from exposure. If condition persists seek medical attention.

INGESTION: If swallowed, dilute with a large amount of water, do not induce vomiting and seek medical attention.

SECTION 5 – FIREFIGHTING MEASURES

FLASH POINT: Not Known.

FLAMMABLE LIMITS IN AIR: Not Known.

AUTOIGNITION TEMPERATURE: Not known.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Dusts may form an explosive mixture with air. Use proper ventilation or dust control to minimize dust generation. Bond and ground as appropriate

FIRE FIGHTING PROCEDURES: Extinguish fire.

EXTINGUISHING MEDIA: Foam; dry chemical; carbon dioxide.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES: Sweep or shovel into closable container for disposal.

METHODS FOR CONTAINMENT: Contain solid material.

SECTION 7 – HANDLING AND STORAGE

HANDLING: If use conditions generate dust or fume, use in well-ventilated area and avoid breathing dust/fumes.

STORAGE: Keep from freezing.

PERSONAL HYGIENE: Use good personal hygiene. Wash hands before eating, drinking or smoking.

PRECAUTIONS FOR SAFE USE AND HANDLING

HANDLING PRECAUTIONS: Sensitive to static discharge - material can accumulate static charges from material handling management. Bond and ground as appropriate.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

<u>MATERIAL</u>	<u>CAS #</u>	<u>WEIGHT %</u>	<u>PEL</u>	<u>Hazardous Ingredient</u>
Formaldehyde polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and phenol	40216-08-8	80 - 94%	N/E	No
Hexamethylenetetramine	100-97-0	7 – 11%	N/E	No
Phenol	108-95-2	1 – 3%	5 ppm	Yes

N/E = not established

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION (cont'd)

CONTROL MEASURES

EYE PROTECTION: Goggles or safety glasses with side shields are recommended.

PROTECTIVE GLOVES: Wear neoprene, nitrile rubber or butyl rubber.

RESPIRATORY PROTECTION: Required if dust levels exceed PEL. Selection and use of respiratory protective equipment, if warranted, should be in accordance with OSHA General Industry Standard 29 CFR 1910.134 in the U.S.A. and with CSA Standard Z94.4-M1982 in Canada.

ENGINEERING CONTROLS: Provide process enclosure or local ventilation needed to maintain dust levels below applicable exposure limits.

OTHER PROTECTIVE EQUIPMENT: None required.

SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE, APPEARANCE, and ODOR: Light yellow powder, characteristic phenol odor.

ODOR THRESHOLD: Not known.

SPECIFIC GRAVITY: 1.2 – 1.25 (water = 1).

VAPOR DENSITY: > 1 (air = 1).

BOILING POINT: Not known.

VAPOR PRESSURE: Not known.

FREEZING POINT: Solid at room temperature.

EVAPORATION RATE: Not known.

FLASH POINT: Not known.

SOLUBILITY IN WATER: Soluble.

MOLECULAR WEIGHT: Not known.

VOLATILE ORGANIC COMPOUNDS: Low volatility.

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Stable, not reactive with water.

INCOMPATIBILITY (material & conditions to avoid): Strong acids, oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide.

SECTION 11 – TOXICOLOGICAL INFORMATION

ACCUTE TOXICITY: Not classified.
TUMORIGENIC DATA: None available.
MUTAGENICITY DATA: Phenol suspected of causing genetic defects.
ACGIH CARCINOGEN: Phenol IARC group 3 – not classifiable.
LD50: hexamethylenetetramine > 5000 mg/kg (rat)
INGESTION: Not classified.
INHALATION: Not classified.
SKIN SENSITIZATION: May cause skin reaction.

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY: Harmful to aquatic life with long lasting effects. Hexamethylenetetramine LC50 fish 1: 49,800 mg/l (96 h; Pimephales promelas, measured concentration.) Phenol LC50 fish 1: 27.8 mg/l (96 h; Brachydanio rerio; pure substance.)
PERSISTENCE AND DEGRADABILITY: Hexamethylenetetramine: hydrolysis in water. Phenol: biodegradable in soil and water. Not data on mixture.
MOBILITY IN SOIL: No information available.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Dispose in accordance with federal, state, provincial and local regulations.

SECTION 14 -- TRANSPORTATION INFORMATION

DOT

PROPER SHIPPING NAME: None for mixture. HAZARD CLASS: Phenol solid, Guide # 153

ID NUMBER: None for mixture, Phenol solid, ID# 1671

Packaging Group: None. ER Guidebook #: None.

IATA Shipping Name: Not regulated as dangerous goods.

IMO Shipping Name: Not regulated as dangerous goods.

ADR/RID: Not Hazardous

GGVS/GGVE: Not Hazardous

IMDG: Not Hazardous

GGVSea: Not Hazardous

ICAO: Not Hazardous

SECTION 15 -- REGULATORY INFORMATION

TSCA Inventory Status: All components listed.

CANADIAN WHMIS: Classification: DIA, D2A, D2B.

ECHA REACH Candidate List: Not listed

EINECS Number: Phenol: 203-632-7; hexamethylenetetramine: 202-95-8;

SARA TITLE III: Product does contain phenol which is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE LIST: 500 lb TPQ (lower threshold); 10,000 lb TPQ (upper threshold) for phenol.

SECTION 313 TOXIC CHEMICALS LIST: 1% de minimis concentration for phenol.

FEDERAL RCRA HAZARDOUS WASTE: Mixture not a listed hazardous waste; but may meet the definition of a characteristic hazardous waste under 40 CFR Part 261. Phenol RCRA waste number is U188.

REPORTABLE QUANTITY (RQ), UNDER U.S.: Phenol: 1,000 lb.

SECTION 16 -- ADDITIONAL INFORMATION

MSDS creation date: November 2012

SDS revision date: August 02, 2018

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, BORIDE Engineered Abrasives assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the material as supplied to the user.