



MATERIAL SAFETY DATA SHEET

BENCHREST 9

Revision 1 ❖ October 6, 2009

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SECTION 1 • PRODUCT AND COMPANY IDENTIFICATION

Product Numbers *BR902, BR902Z, BR904, BR904B, BR916, BR932*
 Product Name *Hoppe's Benchrest 9*
 Synonyms *None*
 Products Uses *Copper Solvent*
 Revision Number *1*
 Revision Date *October 6, 2009*
 Print Date *October 6, 2009*

**24 hr Emergency
Phone Number**

800-255-3924
(CHEM-TEL)

MANUFACTURER INFORMATION		DISTRIBUTOR INFORMATION	
Company Name	<i>Tri-Pac Inc.</i>	Company Name	<i>Bushnell</i>
Address	<i>17336 M-60 East Vandalia, MI 49095</i>	Address	<i>9200 Cody Overland Park, KS 66214</i>
Phone Number	<i>269-476-2303</i>	Phone Number	<i>800-423-3537</i>
Fax Number	<i>269-476-2302</i>	Fax Number	<i>913-752-3570</i>

SECTION 2 • HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	DANGER! CONTENTS EXTREMELY FLAMMABLE. VAPOR MAY FORM AN EXPLOSIVE MIXTURE WITH AIR. VAPOR CAN TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK. AVOID CONTACT WITH SKIN AND EYES. VAPOR HARMFUL. SKIN SENSITIZER. EYE AND SKIN IRRITANT. HARMFUL OR FATAL IF SWALLOWED. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
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OSHA Classification *This product is a "hazardous chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.*

European Classification *F, Xn, Xi
R 11-43-52/53-65-66
S 2-7-16-23-24/25-26-36/37/39-45-61-62*

WHMIS Classification *B2, D2B, E*

HEALTH	* 1
FLAMMABILITY	2
PHYSICAL HAZARD	0



HEALTH HAZARDS		PHYSICAL HAZARDS			
Irritant <input checked="" type="checkbox"/>	Sensitizer <input checked="" type="checkbox"/>	Combustible <input type="checkbox"/>	Explosive <input type="checkbox"/>	Pyrophoric <input type="checkbox"/>	
Toxic <input type="checkbox"/>	Highly Toxic <input type="checkbox"/>	Flammable <input checked="" type="checkbox"/>	Oxidizer <input type="checkbox"/>	Water Reactive <input type="checkbox"/>	
Corrosive <input type="checkbox"/>	Carcinogenic <input type="checkbox"/>	Compressed Gas <input type="checkbox"/>	Organic Peroxide <input type="checkbox"/>	Unstable <input type="checkbox"/>	

LABELING REQUIREMENTS			
CANADA	UNITED STATES	EUROPE & AUSTRALIA	GHS
	DANGER CONTENTS EXTREMELY FLAMMABLE EYE AND SKIN IRRITANT		



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POTENTIAL HEALTH EFFECTS AND SIGNS / SYMPTOMS OF EXPOSURE

Eye Contact	<i>Liquid contact may cause pain along with moderate eye irritation.</i>
Skin Contact	<i>Prolonged or repeated exposure may cause skin irritation. Repeated contact may cause drying or flaking of skin. May cause more severe response if confined to skin.</i>
Ingestion	<i>May cause irritation to membranes of the mouth, throat, and gastrointestinal tract resulting in vomiting and/or cramps. Aspiration of vomit into the lungs may cause inflammation, and possible chemical pneumonitis, bronchopneumonia, or pulmonary edema.</i>
Inhalation	<i>Prolonged or repeated overexposure is anesthetic. May cause irritation of the respiratory tract, or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion or death. Irritation of the mucous membranes, coughing, and dyspnea are also possible.</i>
Effects of Chronic Exposure	<i>Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage (sometimes referred to as "Solvent or Painter's Syndrome"). Intentional misuse by concentrating and inhaling this product may be harmful or fatal.</i>
Medical Conditions Aggravated	<i>May aggravate personnel with pre-existing disorders associated with any of the Target Organs.</i>
Types of Hazards	<i>Sensory Irritation</i>
Target Organs	<i>Eyes, Skin, Respiratory System, Central Nervous System, Liver, Blood</i>
Routes of Exposure	<i>Skin contact, skin absorption, eye contact, inhalation</i>
Potential Environmental Effects	<i>See Section 12 for environmental effects</i>

SECTION 3 • COMPOSITION / INFORMATION ON INGREDIENTS

ID	INGREDIENT	CAS NUMBER	EINECS	EU CLASSIFICATION	% WT
1	<i>Kerosene</i>	<i>008008-20-6</i>	<i>232-366-4</i>	<i>Xn; 65</i>	<i>15 - 40</i>
2	<i>Ethyl Alcohol</i>	<i>000064-17-5</i>	<i>200-578-6</i>	<i>F; 11</i>	<i>15 - 40</i>
3	<i>Oleic Acid</i>	<i>000112-80-1</i>	<i>204-007-1</i>	<i>—</i>	<i>—</i>
4	<i>Amyl Acetate</i>	<i>000628-63-7</i>	<i>211-047-3</i>	<i>10-65</i>	<i>5 - 10</i>
5	<i>Water</i>	<i>007732-18-5</i>	<i>231-791-2</i>	<i>—</i>	<i>—</i>
6	<i>Ammonium Hydroxide</i>	<i>001336-21-6</i>	<i>215-647-6</i>	<i>N, C; 34-50</i>	<i>3 - 7</i>
7	<i>Tetraethylenepentamine</i>	<i>000112-57-2</i>	<i>203-986-2</i>	<i>Xn, N, C; 21/22-34-43-51/53</i>	<i>1 - 5</i>

Risk Phrases	<i>See Section 15 for risk phrase text</i>
LD50 and LC50 Information	<i>See Section 11 for toxicological information</i>
Occupational Exposure Limits	<i>See Section 8 for OELs</i>

SECTION 4 • FIRST AID MEASURES

Ingestion	<i>DO NOT INDUCE VOMITING! ASPIRATION HAZARD. This material may enter the lungs during vomiting. Immediately have the victim drink plenty of water. Keep airways free. Contact a physician immediately. Never give anything by mouth if victim is rapidly losing consciousness, unconscious, or convulsing.</i>
Skin Contact	<i>Remove with soap and water, rinsing and repeating for 15 minutes. Use skin cream to counter any resulting dryness. Consult a physician if irritation continues. If large skin area is affected, remove contaminated clothing.</i>
Eye Contact	<i>Immediately flush with clear water for at least 15 minutes, including under the eyelids. Consult a doctor.</i>
Inhalation	<i>Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.</i>
Notes to Physician	<i>Treat symptomatically.</i>
Antidotes	<i>No specific antidote.</i>



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ID	CANADA ALBERTA OEL	CANADA BC TWA	CANADA ONTARIO TWA/EV	CANADA QUEBEC TWA	MEXICO MPEL-PTA	UNITED KINGDOM WEL	UNITED STATES AIHA WEEL
1	None Established	200 mg/m3	200 mg/m3	None Established	None Established	None Established	None Established
2	1000 ppm	1000 ppm	1000 ppm	1000 ppm	1000 ppm	1000 ppm	None Established
3	None Established	None Established	None Established	None Established	None Established	None Established	None Established
4	100 ppm	50 ppm	50 ppm	100 ppm	100 ppm	None Established	None Established
5	None Established	None Established	None Established	None Established	None Established	None Established	None Established
6	None Established	None Established	None Established	None Established	None Established	None Established	None Established
7	None Established	None Established	None Established	None Established	None Established	None Established	None Established

Engineering Measures Use with adequate ventilation. General ventilation (typically 10 air changes per hour) should be used. Rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system may be necessary to control air contamination below that of the lowest OEL from the table above.

Biological Exposure Indices None Established

General Hygiene Considerations Avoid breathing vapors and contact with the skin and eyes. Always replace overcap when not in use. Keep out the reach of children. Wash hands after use.

Thermal Hazards This product does not present a thermal hazard.

PERSONAL PROTECTIVE EQUIPMENT



Respiratory Protection An approved respirator with an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed occupational exposure limits. If respirators are needed, in the United States compliance with OSHA standard 29 CFR 1910.134 is necessary.

Skin Protection For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing impervious to the ingredients listed in Section 2.

Eye/Face Protection Safety glasses with side shields are recommended as a minimum for any type of chemical handling.

Other Protective Equipment Safety showers and eye-wash stations should be available in the near where the material will be used.

SECTION 9 • PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	> 177 °F (47.0 °C)	Melting / Freezing Point	> -173 °F (-114.2 °C)
Flash Point	> 55 °F (12.8 °C)	Autoignition Temperature, Liquid	410 °F (210.0 °C)
Explosive Limits	0.70% to 19.00%	Decomposition Temperature	Not Available
Flammability	Class IB Flammable Liquid	Density (H ₂ O = 1)	0.852 g/cc
Molecular Weight	Not Available	Weight	7.100 lbs/gal
Vapor Pressure	Not Available	pH	Not Available
Vapor Density	9.70 g/cc Maximum	Evaporation Rate (BuAC = 1)	Not Available
Physical State	Liquid	Partition Coefficient	Not Available
Viscosity	Not Available	Refractive Index	Not Available
Odor Threshold	Not Available	Heat of Combustion	Not Available
Odor	Distinct	Water Solubility	Not Available
Appearance / Color	Clear light to dark amber		
Percent Volatile	72% Wt (74% Vol) Max	VOC Content	4.459 lbs/gal (534.248 g/L)
Percent VOC	64% Wt (67% Vol) Max	HAP Content	None
Solids Content	None	Maximum Incremental Reactivity	1.023 g O ₃ /g



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SECTION 10 • STABILITY AND REACTIVITY

Stability	<i>Stable</i>
Physical Hazards	<i>Flammable</i>
Conditions to Avoid	<i>Not Available</i>
Hazard Polymerization	<i>Not expected to occur</i>
Material Incompatibility	<i>Strong oxidizing agents, ammonia, hydrogen peroxide, strong reducing agents, potassium tert-butoxide, bases, acids, perchloric and permonosulfuric acids, alkali metals, halogens, dimethyl sulfate</i>
Conditions of Reactivity	<i>Heat, sparks, flame, red hot metal</i>
Decomposition Products	<i>Oxides of carbon and/or nitrogen, hydrogen cyanide, nitriles, isocyanates, nitrosamines</i>

SECTION 11 • TOXICOLOGICAL INFORMATION

Irritancy of Product	<i>The following ingredients are eye irritants: Ethyl Alcohol, Tetraethylenepentamine. The following ingredients are skin irritants: Coal Oil, Ammonium Hydroxide, Tetraethylenepentamine.</i>
Sensitization to Product	<i>The following ingredients are considered sensitizers: Tetraethylenepentamine.</i>
Carcinogen Data	<i>None of the ingredients are considered known or suspected carcinogens.</i>
Reproductive Toxicity	<i>None of the ingredients are considered known or suspected reproductive toxicants.</i>
Teratogenicity	<i>None of the ingredients are considered known or suspected teratogens.</i>
Mutagenicity	<i>The following ingredients are considered mutagens: Ethyl Alcohol</i>
Synergistic Products	<i>No known synergistic properties.</i>

LD₅₀ and LC₅₀ Information

ID	ORAL LD ₅₀	DERMAL LD ₅₀	INHALATION LC ₅₀
1	> 5000 mg/kg, rat	> 2000 mg/kg, rabbit	> 5.28 mg/L /4hr, rat
2	6200 mg/kg, rat	> 20000 mg/kg, rabbit	> 8000 mg/L /4hr, rat
3	58000 mg/kg, rat	Not Available	Not Available
4	6500 mg/kg, rat	Not Available	Not Available
5	> 89000 mg/kg, rat	Not Available	Not Available
6	350 mg/kg, rat	Not Available	1.4 mg/L /4hr, rat
7	3990 mg/kg, rat	660 mg/kg, rabbit	Not Available

SECTION 12 • ECOLOGICAL INFORMATION

Mobility	<i>Not Available</i>
Persistence	<i>Not Available</i>
Degradability	<i>Not Available</i>
Bioaccumulation	<i>Not Available</i>
Other Ecologic Data	<i>Do not allow to enter waters, waste water, or soil. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</i>
Effects on the Ozone Layer	<i>This product does not contain any ozone depleting ingredients.</i>

Ecotoxicity

ID	FISH	INVERTEBRATES	AQUATIC PLANTS	MICROORGANISMS
1	Not Available	Not Available	Not Available	Not Available
2	LC50: 11000 mg/L /96 hr	EC50: 10800 mg/L /24 hr	NOEC: 5000 mg/L /7 day	NOEC: 5600 mg/L /16 hr
3	LC50: 205 mg/L /96 hr	Not Available	Not Available	Not Available
4	LC50: 65 mg/L /96 hr	Not Available	Not Available	Not Available
5	Not Available	Not Available	Not Available	Not Available
6	Not Available	Not Available	Not Available	Not Available
7	LC50: 420 mg/L /96 hr	EC50: 24.1 mg/L /48 hr	EC50: 2.1 mg/L /72 hr	EC50: 1600 mg/L /1 hr



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United States - States

ID	CALIFORNIA	DELAWARE	FLORIDA	MASSACHUSETTS	PENNSYLVANIA	MINNESOTA	NEW JERSEY	NEW YORK	WASHINGTON
1	—	—	✓	5	—	—	—	—	—
2	—	—	✓	2,4,5,6 *T1*	—	AO	—	—	✓
3	—	—	—	—	—	—	—	—	—
4	—	✓	✓	2,4,5,6 F8	E	AO	—	✓	✓
5	—	—	—	—	—	—	—	—	—
6	—	✓	—	F8	E	—	✓	✓	—
7	—	—	✓	6	—	—	—	—	—

Canada

ID	A	B	C	WHMIS CATEGORIES						CHEMICAL LISTS				
				D1A	D1B	D2A	D2B	D3	E	DSL	NDSL	NPRI	CWC	
1	B3	—	—	—	—	✓	—	—	—	—	✓	—	—	—
2	B2	—	—	—	—	✓	—	—	—	—	✓	—	5	—
3	—	—	—	—	—	—	—	—	—	—	✓	—	—	—
4	B2	—	—	—	—	—	—	—	—	—	✓	—	—	—
5	—	—	—	—	—	—	—	—	—	—	✓	—	—	—
6	—	—	—	—	—	—	—	—	✓	✓	✓	—	—	—
7	—	—	—	—	—	✓	—	—	✓	✓	✓	—	—	—

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

European Union

CODE	RISK PHRASES
R 11	Highly Flammable
R 43	May cause sensitization by skin contact
R 50/52	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 65	Harmful: may cause lung damage if swallowed
R 66	Repeated exposure may cause skin dryness or cracking

CODE	SAFETY PHRASES
S 2	Keep out of the reach of children
S 7	Keep container tightly closed
S 23	Do not breath fumes
S 24/25	Avoid contact with skin and eyes
S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S 36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S 45	In case of accident or you feel unwell, seek medical advice immediately
S 61	Avoid release to the environment
S 62	If swallowed do not induce vomiting; seek medical advise immediately

RoHS Compliance



This product is RoHS compliant according to the definitions and restrictions given by Directive 2002/95/EC and The Council of January 27, 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Australia

Poisons Schedule Number

None of the ingredients are present at or above a concentration necessary for allocation of a Poisons Schedule Number.

Chemical Inventory Status

All of the ingredients are listed on the Australian Inventory of Chemical Substances (AICS) or are exempt.

SECTION 16 • OTHER INFORMATION

Disclaimer of Liability

The information contained herein is based upon data provided to us by our suppliers, and reflects our best judgement. However, no warranty of merchantability, fitness for any use, or any other warranty or guarantee is expressed or implied regarding the accuracy of such data, or the results to be obtained from use thereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of such application. This information is furnished upon the condition that the persons receiving it shall make their own determinations of the suitability of the material for any particular use. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist.

Revision History

Revision 1, 10/06/2009, Original

MSDS Prepared By

Hazard Communication Associates, <http://www.hazcom411.com>