



SAFETY DATA SHEET

1. IDENTIFICATION

Product Name:	MJB 602 Machining Coolant Blue
Manufacturer:	MJB Welding Supply, Inc. 357 E. Park Avenue Chico, CA 95928
Telephone:	530.342.3589
Fax:	530.342.1715
In case of Emergency:	CHEMTREC (24 hours): 800-424-9300 (US) / 1-703-527-3887 (International)
Product Description	Heavy duty semi-synthetic metalworking fluid.

2. HAZARDS IDENTIFICATION

GHS Classification	Classification of this substance/mixture is based on 29 CFR 1910.1200
Hazard Statements	H312 – Harmful in contact with skin: Acute toxicity, dermal – Category 4 H319 – Causes serious eye irritation: Serious eye irritation – Category 2A H332 – Harmful if inhaled: Acute toxicity, inhalation – Category 4
Hazard Pictogram	
Signal Word	WARNING
Precautionary statements	
Prevention	P261 – Avoid breathing mist, vapors, or spray. P264 – Wash thoroughly after handling. P270 – Do not eat, drink, or smoke when using this product. P280 – Wear protective gloves, protective clothing, eye protection, and face protection.
Response	P301+P330+P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P350 – IF ON SKIN: Gently wash with plenty of soap and water. P332+P313 – IF SKIN irritation occurs: Get medical attention. P363 – Wash contaminated clothing before reuse. P304+P312 – IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P304+P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing. P337+P313 – IF EYE irritation persists: Get medical attention. P363 – Wash contaminated clothing before reuse.
Storage	P401 – Store in accordance with all regulatory and safety measures.
Disposal	P501 – Dispose of contents and container in accordance with all local, regional, national and international regulations.



Other hazards Under normal conditions of use, inhalation and ingestion are not expected to be primary routes of exposure. If product enters lungs, aspiration may occur. If product enters lungs signs and symptoms may include; coughing, choking, breathing difficulty, chest congestion, shortness of breath, and / or fever. These symptoms may be delayed for several hours after exposure. Prolonged or repeated inhalation exposure may cause damage to the respiratory system. Ingestion may result in nausea, vomiting and / or diarrhea. Pre-existing skin conditions may be aggravated by exposure to this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture:

Components/Ingredients	CAS No.	%*
Mineral oil***	Proprietary**	<50.0
2-Aminoethanol	141-43-5	<5.0
2-[cyclohexyl(2-hydroxyethyl)amino]ethanol	4500-29-2	<5.0
2-[bis(2-hydroxyethyl)amino]ethanol	102-71-6	<5.0
2-[3,5-bis(2-hydroxyethyl)-1,3,5-triazinan-1-yl]ethanol	4719-04-4	<5.0
Boric acid	10043-35-3	<1.0
Alcohols, C10-16, ethoxylated propoxylated	69227-22-1	<1.0
Polyethylene glycol mono(octylphenyl) ether	9036-19-5	<1.0
2-(2-hydroxyethylamino)ethanol	111-42-2	<1.0
3-iodoprop-2-ynyl N-butylcarbamate	55406-53-6	<1.0

*This is not intended to be a complete compositional disclosure. Information provided pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). See Section 8 for Exposure Limits, if any.

**The specific chemical identity of this compound is withheld as a trade secret in accordance with paragraph (i) of 29 CFR 1910.1200.

***Mineral oil may contain CAS#: 64742-58-1, 64741-88-4, 64742-01-4, 64742-57-0, 64742-57-0, 64742-62-7, 72623-83-7, 64741-89-5, 64741-44-2, 64741-96-4, 64741-97-5, 64742-46-7, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1, 69029-75-0, 64741-95-3.

4. FIRST AID MEASURES

Eye	Flush eyes with a continuous flow of water for a minimum of 15 minutes. If applicable, remove contact lenses and continue to flush eyes with water. Obtain medical attention. Suitable emergency eye wash facility should be immediately available.
Skin	Wash all contact areas with a continuous flow of water and mild soap. If itching or redness develops, seek medical attention. If persistent irritation occurs, get medical attention. Contaminated clothing should be removed immediately and washed before reuse. Contaminated shoes should be discarded. Suitable emergency safety shower facility should be available in work area.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Maintain an open airway and get medical attention immediately. If victim experiences any symptoms such as; coughing, shortness of breath, burning in the mouth or air ways, get medical attention immediately.
Ingestion	If swallowed get medical attention immediately. DO NOT induce vomiting. If victim is convulsing or unconscious, and vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth. If delayed signs persist, get medical attention.



Most important symptoms/effects, acute and delayed

See Section 8 and Section 11 for more detailed information on health effects and symptoms.

Description of necessary first aid measures / specific treatments

Emergency eye wash facility and safety shower facility should be immediately available.

Notes to physician Treatment should in general be symptomatic and directed to relieving any effects.

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. FIRE FIGHTING MEASURES

Flash Point	>200°C / >392°F (PMCC)
Auto Ignition Temperature	Not determined
Explosion Limits	Not determined
Extinguishing Media	Water spray, foam, dry chemical, sand, earth, and carbon dioxide are appropriate extinguishing media. DO NOT use water jet to extinguish flames.
Protective Equipment for Firefighters	Firefighters should use standard protective equipment and in enclosed spaces, self – contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.
Hazardous Combustion Products	Combustion products may include the following: Smoke - a complex mixture of airborne solid, liquid, and gases. Oxides of carbon, carbon monoxide, carbon dioxide, sulfur oxides, oxides of nitrogen, oxides of phosphorus, and other unidentified organic and inorganic compounds.
Special Fire Fighting Instructions	Keep people away and evacuate the area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
Unusual Fire or Explosion Hazards	Do not use welding or cutting torch on or near drum even when empty. If improperly reused for other products, it could ignite. In case of fire, containers may explode from internal pressure.

6. ACCIDENTIAL RELEASE MEASURES

Personal Precautions	Trained responders should wear appropriate personal protective equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep people away from and upwind of spill or leak. Ensure adequate ventilation, especially in confined areas. Product is slippery, avoid falls.
Environmental Precautions	Avoid release to the environment. Limit leakage with earth, sand, oil-dri or other containment material. Do not discharge into the drains, surface water, or groundwater. Dispose of absorbed material in accordance with local, state, and federal regulations.
Methods for Containment and Cleanup	Use absorbent material. Dispose of absorbed material in accordance with local, state, and federal regulations.
Notification	Notify applicable local, state and federal authorities if a spill is not contained.

7. HANDLING AND STORAGE

Handling	Do not get in eyes, hair, on skin, or on clothing. Avoid breathing mists of product. Do not swallow. Use local exhaust ventilation if there is risk of inhalation of vapors, mists, or aerosols, see Section 8. Wash thoroughly after handling. Wear protective gloves, protective clothing,
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eye protection, and face protection.

Storage	Store in a properly labelled closed container. Store in a dry, cool and well ventilated area, away from sunlight or heat sources. Keep container tightly closed. Protect from moisture. Do not store with oxidizers or acids. Recommended storage temperature: 0 - 50°C / 32 - 122°F.
Special Packing Requirements	Store in original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protective Equipment	<p>Hand Protection: Use impervious gloves.</p> <p>Eye Protection: Wear safety glasses with side shields or full face shield.</p> <p>Skin Protection: Wear protective clothing.</p> <p>Respiratory Protection: Recommended if ventilation is limited.</p>
Engineering Measures / Controls	<p>Ventilation: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Proper and adequate ventilation is imperative where the product is heated, sprayed, and in general where there is a higher potential for airborne particulate to be generated.</p> <p>Monitor: Monitor the air and breathing zones of workers and in the general workplace to ensure airborne levels are in compliance with occupational exposure limits.</p> <p>Other Measures: Eye-wash station.</p>
Environmental Measures / Controls	Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions and releases to the environment.

Exposure Limits / Guidelines

Component	CAS #	Basis	Type	Limit Value
Mineral oil		OSHA – Mist	TWA – PEL	5 mg/m ³
		NIOSH – Mist	TWA – REL	5 mg/m ³
		NIOSH – Mist	STEL – REL	10 mg/m ³
		ACGIH – Inhalable Fraction	TWA – TLV	5 mg/m ³
2-Aminoethanol	141-43-5	OSHA	TWA – PEL	6 mg/m ³
		NIOSH	TWA – REL	8 mg/m ³
		NIOSH	STEL – REL	15 mg/m ³
		ACGIH	TWA – TLV	7.5 mg/m ³
		ACGIH	STEL – TLV	15 mg/m ³
2,2',2''-Nitrilotriethanol	102-71-6	ACGIH	TWA – TLV	5 mg/m ³
2-(2-hydroxyethylamino)ethanol	111-42-2	OSHA	TWA – PEL	15 mg/m ³
		NIOSH	TWA – REL	15 mg/m ³
		ACGIH – Skin absorption	TWA – TLV	1 mg/m ³
Boric acid	10043-35-3	ACGIH	TWA – TLV	2 mg/m ³
		ACGIH	STEL – TLV	6 mg/m ³
General Industry		OHS	TWA – PEL	5 mg/m ³

Personal Protective Equipment



Respiratory Protection	If engineering controls do not maintain adequate air quality and exceed minimum airborne concentrations which may compromise worker health, select respiratory protection equipment applicable for the specific conditions of use which meet all local, state and federal laws and regulations. If an air-filtering respirator is required, contact respirator and filter suppliers for suitable filters to protect for combined particulate, organic gases and vapors.
Dermal Protection	Where skin and hand contact may occur with this product: wear clothing suitable for the standard work environment; and, wear gloves and clothing suitable for protection against contact. Such gloves may be made from: neoprene or nitrile rubber; however, the specific gloves selection should be dependent on the particular usage, length and frequency of contact, and operations being performed.
Eye Protection	Wear chemical safety glasses or full face shield.
Foot Protection	Wear chemical resistant non-slip safety shoes applicable to the work environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Amber
Odor	Mild
Odor threshold	Not determined
pH	9.0 – 9.5
Melting point	Not determined
Boiling point	Not determined
Flash point	>200°C (>392°F) PMCC
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Lower and upper explosive limits	Not determined
Vapor pressure	Not determined
Specific gravity	1.00 – 1.05 @ 20°C
Solubility	Dispersible in water
Log P _{ow}	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Viscosity (kinematic @ 40°C)	Not determined
Viscosity (kinematic @ 100°C)	Not determined
Volatility	Not determined
VOC (w/w)	8.9% (w/w)

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended handling and storage conditions.
Conditions to Avoid	Flames, extreme temperatures, direct sunlight, incompatible materials.
Incompatible materials	Nitrates, nitrosamine forming compounds, acids, oxidizers, and reducing agents.
Hazardous decomposition materials	Stable under recommended storage conditions. Irritating and/or toxic fumes and gases may be emitted upon product decomposition.
Hazardous polymerization	Not expected.

11. TOXICOLOGICAL INFORMATION



Oral – Acute Toxicity	Not determined for this product; however, based on assessment of components, this product is not expected to pose an acute toxicity hazard if swallowed. May be harmful if swallowed and / or especially if larger amounts are swallowed.				
Inhalation – Acute Toxicity	Not determined for this product; however, based on an assessment of components, this product is not likely to pose an inhalation acute toxicity hazard. Excessive exposure may cause irritation to the upper respiratory tract, and headache. Prolonged excessive exposure to mist may cause serious adverse effects.				
Respiratory Sensitization	Not determined for this product. Not expected to be a respiratory sensitizer based on assessment of components.				
Aspiration	Not determined for this product. Not expected to be an aspiration hazard based on assessment of components.				
Dermal – Acute Toxicity	Hazard Category 4 Based on assessment of components, this product may pose acute dermal harm if in contact with skin. Prolonged or repeated contact without proper cleaning may result in irritation, dryness, or dermatitis.				
Skin Corrosion / Irritation	Not determined for this product. Not expected to be a skin irritant or be corrosive to the skin based on assessment of components. In some with skin disorders or skin sensitivities, contact with skin may cause redness, itching, irritation, and swelling to the skin.				
Skin Sensitization	Not determined for this product. Not expected to be a skin sensitizer based on assessment of components.				
Serious Eye Damage / Irritation	Hazard Category 2A Based on an assessment of components, this product may pose serious risk of eye irritation, including; irritation, pain, and redness. Prolonged or excessive contact with the eyes may cause more serious and permanent damage to the eyes.				
Germ Cell Mutagenicity	Not determined for this product.				
Carcinogenicity	Not determined for this product. Not classified based on available information.				
	<table border="0" style="width: 100%;"> <tr> <td style="width: 25%;">IARC</td> <td style="width: 25%;">NTP</td> <td style="width: 25%;">ACGIH</td> <td style="width: 25%;">OSHA</td> </tr> </table>	IARC	NTP	ACGIH	OSHA
IARC	NTP	ACGIH	OSHA		
Reproductive Toxicity	Not determined for this product.				
Teratogenicity	Not determined for this product.				
STOT (Specific Target Organ Toxicity) Single Exposure	Not determined for this product.				
STOT (Specific Target Organ Toxicity) Repeated Exposure	Not determined for this product.				
Additional	Ensure all who handles or may potentially handle this product reads and understands the potential hazards associated with this product.				

12. ECOLOGICAL INFORMATION



Ecotoxicity Do not release into the environment. Ecotoxicological data have not been specifically determined for this product. This product may present a toxicity hazard to aquatic life and environments. Do not discharge effluent containing this product into any sewer system or water systems unless in accordance with the requirements of all local, state, and federal regulations. Notification and proper permitting, to and from all applicable authority, is required prior to discharge.

Acute Toxicity to Fish:

Acute Toxicity to Aquatic Invertebrates:

Acute Toxicity to Algae and Aquatic Plants:

Chronic Aquatic Toxicity

Not determined for this product.

Toxicity to Bacteria

Not determined for this product.

Mobility Not determined for this product.

Soil/water partition coefficient (K_{oc}) Not determined for this product.

Biodegradation Not determined for this product.

Bioaccumulation Potential Not determined for this product. Metabolism and other physical properties may reduce the bioconcentration and bioavailability.

Photodegradation Not determined for this product.

Biological Oxygen Demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
Not determined for this product.			

Chemical Oxygen Demand (COD): Not determined for this product.

Theoretical Oxygen Demand: Not determined for this product.

Partition coefficient, soil organic carbon-water (K_{oc}): Not determined for this product.

Henry's Law Constant: Not determined for this product.

Distribution in Environment (Mackay Level 1 Fugacity Model):

Air	Water	Biota	Soil	Sediment
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Other Adverse Effects None known.

13. DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Dispose of in accordance to federal, state and local regulations.

Empty containers may contain residue and may be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it



formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product, may be regulated.

14. TRANSPORT INFORMATION

US DOT Regulations Non-Bulk (Land Transport)	Not regulated
US DOT Regulations Bulk (Land Transport)	Not regulated
IATA/ICAO Regulations (Air Transport)	Not determined
IMDG/IMO Regulations Non-Bulk (Maritime Transport)	Not determined
IMDG/IMO Regulations Bulk (Maritime Transport)	Not determined

It is the responsibility of the handlers and transportation organization who is transporting this material to follow all applicable laws, regulations and rules relating to the transportation of this material. The information provided above is not intended to convey all specific regulatory or operational information and requirements which may pertain to this product.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard

This product is considered hazardous by the OSHA Hazardous Communication Standard, 29 CFR 1910.1200.

Components Requiring Notifications:

EPCRA Section 302 – Emergency Planning Extremely Hazardous Substances Threshold Planning Quantity (40 CFR 355)

Component	CAS #	Amount	Reportable Quantity
Ethylene oxide	75-21-8	<0.1% (impurity)	10 pounds
Propylene oxide	75-56-9	<0.1% (impurity)	100 pounds

US EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

Component	CAS #	Amount	Reportable Quantity
Ethylene oxide	75-21-8	<0.1% (impurity)	10 pounds
Propylene oxide	75-56-9	<0.1% (impurity)	100 pounds
2-(2-hydroxyethylamino)ethanol	111-42-2	<1.0%	100 pounds

CAA Section 112(r) TQ

Component	CAS #	Amount	Reportable Quantity
Ethylene oxide	75-21-8	<0.1% (impurity)	10,000 pounds
Propylene oxide	75-56-9	<0.1% (impurity)	10,000 pounds

Section 313 – Toxic Chemicals (40 CFR 372.65)

Component	CAS #	Amount
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This product is not known to contain any known chemical components which exceed the threshold De Minimis reporting levels of SARA Title III, Section 313.

SARA Hazard Designation Sections 311/312 (40 CFR 370) (Emergency Planning and Community Right-to-Know Act of 1986)

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Reactive Hazard	No
Sudden Release or Pressure Hazard	No
Hazard Not Otherwise Classified (HNOC)	No

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product may contain chemicals known to the State of California to cause cancer, birth defects or other harm.

Component	CAS#	Concentration
2-(2-hydroxyethylamino)ethanol	111-42-2	<1.0%



1,4-Dioxane	123-91-1	<0.1% - impurity
Ethylene oxide	75-21-8	<0.1% - impurity
Propylene oxide	75-56-9	<0.1% - impurity

State Right to Know / Hazardous Substance List Information
 Component

The following chemicals are present on one or more Right to Know / Hazardous Substance Lists for the states of MA, MI, MN, NJ, PA and RI.

Component	CAS #	Amount
Hydrotreated heavy naphthenic	Proprietary	<50.0%
2,2',2''-Nitrilotriethanol	102-71-6	<1.0%
2-Aminoethanol	141-43-5	<1.0%
Boric acid	10043-35-3	<1.0%
2-(2-hydroxyethylamino)ethanol	111-42-2	<1.0%
Ethylene oxide	75-21-8	<0.1% - impurity
1,4-Dioxane	123-91-1	<0.1% - impurity
Propylene oxide	75-56-9	<0.1% - impurity

Chemical Inventories: All components of this product are listed or exempt under the following chemical inventories.

TSCA	EINECS / ELINCS / NLP	AICS	ENCS / ISHL	PICCS	IECSC	DSL	NDSL	ECL	NZIOC
Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	-

16. ADDITIONAL INFORMATION

Revision Date: February 10th, 2022

Revision #: DML-3

Content was prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This document should be made available to all who may handle this product.

Hazard Rating System

	Health	Fire	Reactivity
NFPA	2	0	0
HMIS	2	0	0

Disclaimer: The information presented herein has been compiled from sources considered to be dependable and is accurate as of the date issued. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use are beyond our control, we make no warranty regarding the accuracy of such data or its suitability for any use or for any consequence of its use. The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Safe handling and use remain the responsibility of the purchaser and the purchaser has the sole responsibility to determine the suitability of the materials for any use and the manner of user contemplated. MJB Welding Supply, Inc. assumes no responsibility for injury to the recipient or to third persons or for any damage to any property and the recipient assumes all such risks.