

Portage, MI 49002 * (269) 345-8691

Safety Data Sheet

All Bearing Stock SAE 863 (ASTM B439 Grade 4)

Revised: August 1, 2015

Meets the Requirements of OSHA Standard 29 CFR 1910.1200; Hazard Communication and EPA Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act

Section 1 – Material Identifications				
Manufacturer:	Bunting Bearings, LLC	Emergency Telephone Number		
	4252 E. Kilgore Rd.	269-345-8691		
	Portage, MI 49002	Information Telephone Number		
		269-345-8691		
Product Class:	All SAE 863 (ASTM B439	Grade 4)/BB -16 Bearings		

Section 2 – Hazards Identifications

GHS Classification:

Note: In the form in which it is sold, this product is not regulated as a Hazardous Product in the U.S. or in Canada.

Health	Environmental	Physical
Does not meet criteria	Does not meet criteria	Does not meet criteria
GHS Label: None required		
Single Word: None required		

WHMIS Classification: None required

Hazard Statement	Precautionary Statements	
None required	None required	

Section 3 – Composition/Information on Ingredients			
Ingredient(s)	CAS No.	Percent	
Copper	7440-50-8	18-22%	
Iron	7439-89-6	BAL	
Graphite	7782-42-5	< 1%	
Mineral Spirits	64742-47-8	<.01	
Stearic/Palmitic Acid	67701-03-5	<.1	
Residual Oils, petroleum, solvent de-waxed	64742-62-7	*	
Distillates,, petroleum, solvent de-waxed	64742-65-0	*	
Heavy paraffinic			
Residual oils, petroleum, solvent-refined	64742-01-4	*	
Distillates, petroleum, hydro treated heavy paraffinic	64742-54-7	*	

No more than a cumulative total of 2.3% - 4.5% •

Section 4 – First Aid Measures

Routes of Entry:

Inhalation, Eye, Skin and Ingestion.

Ingestion: Inhalation:	If swallowed and the person is conscious, immediately give large amounts of water. Try to induce vomiting. Get medical attention. Do not eat or smoke when handling material. Practice good hygiene habits; wash before handling any edible products. If a person breathes in large amounts of dust of fume, move the exposed people to fresh air. If over-exposed to fumes or oil mist, remove from further exposure until excessive fumes or oil mist conditions subside. Get medical attention.
Eye Contact:	Immediately flush with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	Immediately wash with plenty of soap and water. Seek medical attention is injury is severe.

Section 5 Fire Fighting Measures				
Flash Point:	Above 1290F	Flammable Limits:	Upper:	N/A
Method:	N/A		Lower:	N/A
Extinguishing Media:		Foam, dry chemical or sand. Do not use water		
Special Fire Fighting Procedures:		Protective Clothing NIOSH-self-containe	d breathing ap	paratus
Unusual Fire and Explosion Hazards:		Fine chips or dust may ignite and should be stored in a well-ventilated area.		

Section 6 Accidental Release Measures

No special precautions are necessary for spills of bulk materials. If large quantities of dust are spilled, remove by vacuuming or wet sweeping to prevent heavy concentrations of air borne dust. Respirators and protective clothing are recommended.

Section 7 – Handling and Storage

Use good safety practices. Store dust away from sources of ignition. Keep dust dry and away from exposure to water.

Section 8 – Exposure Controls/Personal Protection			
Ingredient(s)	OSHA PEL	ACGIH TLY	V
Copper	1.0 mg/m^3	1.0 mg/m^3	dust
Copper	0.1 mg/m^3	0.2 mg/m^3	fume
Iron	10.0 mg/m^3	5.0 mg/m^3	dust
Iron	10.0 mg/m^3	5.0 mg/m^3	fume
Residual Oils, petroleum, solvent de-waxed	5.0 mg/m^3	5.0 mg/m^3	mist
Distillates,, petroleum, solvent de-waxed	5.0 mg/m^3	5.0 mg/m^3	mist
Heavy paraffinic			
Residual oils, petroleum, solvent-refined	5.0 mg/m^3	5.0 mg/m^3	mist

Distillates, petroleum, hydro treated	5.0 mg/m^3	5.0 mg/m^3	mist
heavy paraffinic	2	2	
Mineral Spirits	$2,900 \text{ mg/m}^3$	100 mg/m ³	
Stearic/Palmitic Acid *			

* - There are no established Exposure limits from the manufacturer, supplier importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Carcinogen: Materials not listed as carcinogens by NTP, IARC and OSHA.

Respiratory Protection:		When required, employees should wear MSHA or NIOSH approved respirators for protection against airborne dust or fumes having a TLV of not less than 0.05 mg/m3. Keep exposure below TLV/TWA's.		
Ventilation:		Use general or local exhaust ventilation to keep airborne concentrations of dust and fumes below the TLV.		
Protective Gloves:		The use of impervious gloves or barrier cream to protect skin is recommended.		
Eye Protection:		Approved safety glasses and/or goggles should be worn during any machining, grinding, cutting, or other operation from which airborne particles may be emitted.		
Other Protective Clo	othing:	N/A		
Work/Hygienic Practices:		Wash hands after handling materials. Food or drink should not be consumed in the work area. Wash hands and face prior to eating, drinking or smoking.		
Section 9 – Physical	and Cl	nemical Properties		
Boiling Point:	N/A	Specific Gravity (H₂O = 1): $7.5-9.0$		
Vapor Pressure:	N/A	Melting Point: 1900F – 2200F		
Vapor Density:	N/A	Evaporation Rate: N/A		
Solubility in Water:	Insolu	-		
Appearance:		h color		
Odor:	-	al spirit odor		
Section 10 – Stability and Reactivity				
Stability:	v	Copper and iron alloys are stable under normal conditions of use storage and transportation.		
Conditions to Avoid:		Molten metal may react violently with water. Avoid contact of chips and dust with heat, oxidizers, acids, alkali's, molten lithium and halogenated compounds.		
Incompatibility:		Avoid acids, bases and oxidizers.		

Hazardous Polymerization: Will not occur.

Hazardous Decomposition: Possibly metal fumes

Section 11 – Toxicological Information

Copper: Under normal handling and use, exposure to the solid form of copper alloys presents few health hazards. Thermal cutting, melting, machining or grinding may produce fumes or dust containing the component elements and breathing these fumes or dust may present potentially significant health hazards. The exposure levels in Section II are relevant to fumes and dust. Fumes of copper and manganese may cause metal fume fever with flu-like symptoms, and copper may cause hair discoloration. Copper fumes and dust irritate the nose and throat. If too many fumes are inhaled, it will cause a sweet or metallic taste in the mouth. Inhaling excessive amounts of copper dust and fume over a long period of time can cause anemia.

- <u>Mineral Spirits:</u> Prolonged or repeated skin contact may cause skin irritation. Product contacting the eyes may cause eye irritation. Human health risks from person to person. As a precaution, exposure to vapors, mists and fumes should be minimized. This product has low order of acute oral toxicity, but minute amounts aspirated into the lungs during ingestion may cause mild to severe pulmonary injury. High vapor/aerosol concentrations may cause central nervous system effects such as headache, nausea, drowsiness, breathlessness, fatigue, central nervous system depression, convulsions, and loss of consciousness.
- **Iron Oxide:** Chronic overexposure to iron oxide may cause an apparent benign pneumoconiosis. In the case of iron oxide, this is called siderosis.

Section 12 – Ecological Information

All components of this product are listed on the Toxic Substance Control Act (TSCA) inventory list. There are no reportable quantities on the Comprehensive Environmental Response Compensation and Liability Act (CERLA) list. Component(s) are listed under various sections of the Clean Water Act (CWA) and the Clean Air Act (CAA). Contact your local/state authorities to determine if substances are regulated under their jurisdiction.

Section 13 – Disposal Considerations

Follow Federal, State and local regulations regarding disposal. Scrap metals can generally be reclaimed and recycled. Do not dump into sewers, on the ground, or into any body of water.

Section 14 – Transportation Information

Non-dangerous product for transportation by road, sea and air. No labels are required.

Section 15 – Regulatory Information

These products contain copper which is subject to the annual reporting requirements of SARA Section 313 (40 CFR 372) and of the Emergency Planning and Community Right to Know Act of 1986.

Section 16 – Other Information				
HMIS Rating:	Copper:	Health 1, Flammability 0, Reactivity 0		
	Iron:	Health 1, Flammability 0, Reactivity 0		
NFPA Rating:	Copper:	Health 1, Flammability 0, Reactivity 0		
	Iron:	Health 1, Flammability 0, Reactivity 0		
Revised:	August 1, 2015			

The above information is based on upstream suppliers and furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Bunting Bearings LLC. The data on these sheets relates only to the specific material designated herein. Bunting Bearings LLC assumes no legal responsibility for use or reliance upon this data.