

Copper anti-seize Faslub®

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SECTION 1. IDENTIFICATION

Product identifier used on the label: Copper anti-seize Faslub®

Product Code(s) : #412

Recommended use of the chemical and restrictions on

use : Corrosion inhibitor

Use pattern: Professional Use Only Recommended restrictions: None known.

Chemical family : Mixture

of the supplier: the manufacturer: Molyslip (Canada) Inc. Refer to supplier

PR Distribution 6500 rue Zéphirin Paquet Québec, QC G2C 0M3 1800-463-5259 www.prdistribution.ca

24 Hr. Emergency Tel #: 24 Hr. Emergency Tel. # (613) 996-6666 (CANUTEC)

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Solid ,copper coloured. Bland odor.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification:

Specific Target Organ Toxicity, Repeated Exposure - Category 2

Label elements

Hazard pictogram(s)



Signal Word

WARNING!

Hazard statement(s)

May cause damage to organs through prolonged or repeated exposure.

Precautionary statement(s)

Do not breathe dust or fume.

Get medical advice/attention if you feel unwell.

Dispose of contents/container in accordance with local regulation.



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Other hazards

Other hazards which do not result in classification:

Ingestion may cause irritation of the mouth, throat and stomach. Direct eye contact may cause slight or mild, transient irritation. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath. Dust may form explosive mixture in air.

Environmental precautions:

Avoid release to the environment. Very toxic to aquatic life with long lasting effects. See ECOLOGICAL INFORMATION, Section 12.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	Common name and synonyms	CAS#	Concentration (% by weight)
Talc (containing no asbestos fibers)	Hydrous magnesium silicate	14807-96-6	40.00
Copper	Copper compounds	7440-50-8	10.00

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Ingestion

: Do not induce vomiting. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical attention if symptoms persist.

Inhalation

Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only.

Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact

Wash affected areas with soap and water. Take off contaminated clothing and wash before re-use. Get medical attention if irritation develops and persists.

Eye contact

Flush with large amounts of water for 15 minutes. Remove contact lenses, if present

and easy to do. If irritation or symptoms develop, seek medical attention.

Most important symptoms and effects, both acute and delayed

Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Direct skin contact may cause temporary redness. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath. Direct eve contact may cause temporary redness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause damage to the lungs through prolonged or repeated exposure if inhaled.

Indication of any immediate medical attention and special treatment needed

: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

Unsuitable extinguishing media

: Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

: Dust may be ignited if suspended in air, however, not expected to be a significant fire risk.

Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.



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Flammability classification (OSHA 29 CFR 1910.106)

: Not flammable.

Hazardous combustion products

: Metal oxides

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. A full-body chemical resistant suit should be worn.

Special fire-fighting procedures

Evacuate personnel to safe areas. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Dike for water control. Avoid release to the environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Environmental precautions :

Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For large spills, dike the area to prevent spreading.

Methods and material for containment and cleaning up

: Ventilate the area. Prevent further leakage or spillage if safe to do so. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Contact the proper local authorities.

Special spill response procedures

If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

US CERCLA Reportable quantity (RQ): See section 15.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Use only outdoors or in a well-ventilated area. Wear suitable protective equipment. Do not breathe dust or fume. Avoid contact with skin, eyes and clothing. Keep away from heat and flame. Keep away from incompatibles. Label containers appropriately. Wash thoroughly after handling. Keep containers closed when not in use. Avoid dust formation

Conditions for safe storage

Store in a cool, dry, well-ventilated area. Store away from incompatibles and out of direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. No smoking in the area. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Incompatible materials

: Strong oxidizing agents ;Chlorine;Acetylene



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SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:				
Chemical Name	ACGIH '	TLV_	OSHA P	PEL PEL
	<u>TWA</u>	STEL	<u>PEL</u>	<u>STEL</u>
Talc (containing no asbestos fibers)	2 mg/m³ (respirable) (talc containing no asbestos)	N/Av	20 mppcf	N/Av
Copper	0.2 mg/m³ (fume); 1 mg/m³ (Dust and mist)	N/Av	0.1 mg/m³ (fume); 1 mg/m³ (Dust and mist)	N/Av

Exposure controls

Ventilation and engineering measures

: Provide exhaust ventilation or other engineering controls to keep the airborne

concentration of vapours below their respective threshold limit value.

Respiratory protection: Respiratory protection is required if the concentrations exceed the TLV. Use a NIOSH

approved dust respirator if dust levels exceed exposure limits. Seek advice from

respiratory protection specialists.

Skin protection: Wear protective gloves. The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye / face protection: Chemical goggles must be worn to prevent dusts from entering the eyes.

Other protective equipment : Wear appropriate protective clothing to prevent skin contact, such as coveralls or long

sleeved shirt, long pants, and shoes and socks. Wear protective gloves. An eyewash station and safety shower should be made available in the immediate working area.

Other equipment may be required depending on workplace standards.

General hygiene considerations

Do not breathe dust or fume. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove

soiled clothing and wash it thoroughly before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid, copper coloured

Odour : Bland odour.

Odour threshold : No information available. pH : No information available.

Melting/Freezing point : $<-10^{\circ}$ C Initial boiling point and boiling range

: Not available.

Flash point : >150°C

Flashpoint (Method) : Pensky Martens Closed Cup
Evaporation rate (BuAe = 1) : No information available.
Flammability (solid, gas) : The product is not flammable.

Lower flammable limit (% by vol.)

: N/Ap

Upper flammable limit (% by vol.)

: N/Ap

Oxidizing properties : None known.



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Explosive properties: Dust may form explosive mixture in air.

Vapour pressure: No information available.Vapour density: No information available.

Relative density / Specific gravity

: 1.1

Solubility in water : Insoluble.

Other solubility(ies) : No information available.

Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

: Not applicable.

Auto-ignition temperature : No information available.

Decomposition temperature : No information available.

Viscosity : Not applicable.

Volatiles (% by weight) : No information available.

Volatile organic Compounds (VOC's)

: Nil

Absolute pressure of container

: N/Ap

Flame projection length : N/Ap Other physical/chemical comments

: No additional information.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions

: Hazardous polymerization does not occur.

Conditions to avoid : Ensure adequate ventilation, especially in confined areas. Avoid contact with

incompatible materials. Avoid dust formation.

Incompatible materials : See Section 7 (Handling and Storage) for further details.

Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

<u>Information on likely routes of exposure:</u>

Routes of entry inhalation : YES
Routes of entry skin & eye : YES
Routes of entry Ingestion : YES
Routes of exposure skin absorption

: NO

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath.





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Sign and symptoms ingestion

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Sign and symptoms skin : May cause mild skin irritation on prolonged contact.

Sign and symptoms eyes : Direct eye contact may cause slight redness.

Potential Chronic Health Effects

: May cause damage to the lungs through prolonged or repeated exposure if inhaled.

Mutagenicity : Not expected to be mutagenic in humans.

Carcinogenicity : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity

: Not expected to have other reproductive effects.

Sensitization to material : N

: Not expected to be a skin or respiratory sensitizer.

Specific target organ effects: This material is classified as hazardous under U.S. OSHA regulations (29CFR

1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Specific target organ toxicity (STOT), repeated exposure - Category 2.May cause damage to the lungs through prolonged or

repeated exposure if inhaled.

Not classified as a specific target organ toxicity-single exposure.

Medical conditions aggravated by overexposure

: Pre-existing skin, eye and respiratory disorders.

Synergistic materials: No information available.

Toxicological data : See below for toxicological data on the substance.

	LC50(4hr)	LD ₅₀			
Chemical name	inh, rat	(Oral, rat)	(Rabbit, dermal)		
Talc (containing no asbestos fibers)	N/Av	N/Av	N/Av		
Copper	> 5.11 mg/L (dust) (No mortality)	> 2500 mg/kg	> 2000 mg/kg		

Other important toxicological hazards

: See Section 2 for additional information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

: Very toxic to aquatic life with long lasting effects. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

lu ave di auta	040 No	Toxicity to Fish				
<u>Ingredients</u>	CAS No	LC50 / 96h	NOEC / 21 day	M Factor		
Talc (containing no asbestos fibers)	14807-96-6	> 110 000 mg/L (QSAR)	1413 mg/L (30 days) (QSAR)	None.		
Copper	7440-50-8	0.19-0.21 mg/L	N/Av	1		



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<u>Ingredients</u>	CAS No	Toxicity to Daphnia				
		EC50 / 48h	NOEC / 21 day	M Factor		
Talc (containing no asbestos fibers)	14807-96-6	36 812 mg/L (QSAR)	1460 mg/L (30 days) (QSAR)	None.		
Copper	7440-50-8	0.2-0.52 mg/L (Daphnia magna)	0.368 mg/L (Daphnia magna)	1		

<u>Ingredients</u>	CAS No	Toxicity to Algae				
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor		
Talc (containing no asbestos fibers)	14807-96-6	7203 mg/L/96hr (Green algae) (QSAR)	N/Av	None.		
Copper	7440-50-8	0.0127 mg/L (Green algae)	N/Av	10		

Persistence and degradability

: No data is available on the product itself.

Bioaccumulation potential: No data is available on the product itself.

<u>Components</u>	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Talc (containing no asbestos fibers) (CAS 14807-96-6)	- 1.5 (estimated)	N/Av

Mobility in soil

: No data is available on the product itself.

Other Adverse Environmental effects

: No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal

: Handle waste according to recommendations in Section 7. Empty containers may contain hazardous residues.

Methods of Disposal

: Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA

: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method.



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SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	None.	Not regulated.	not regulated	none	\otimes
19CFR/DOT Additional information	Not regulated for	or road or rail shipment if packaged in non-bulk containers	s (450 L / 119 G	allons or les	ss each).
TDG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)	9	III	♣
TDG Additional nformation	May be shipped gross mass.	d as LIMITED QUANTITY when transported in units less t	han 5 kg, in pac	kages not e	exceeding 30 kg
ICAO/IATA	UN3077	Environmentally hazardous substance, solid, n.o.s. (Copper)	9	III	
ICAO/IATA Additional nformation	Refer to the ap	propriate Packing Instruction, prior to shipping this materiage this material.	al. Review all St	ate and Ope	erator Variations,
IMDG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)	9	III	♣
IMDG Additional nformation	May be shipped 30 kg gross ma	d as Limited Quantity when transported in containers no la ass.	arger than 5.0 kç	າ g; in packag	es not exceeding

Special precautions for user: Appropriate advice on safety must accompany the package.

Environmental hazards

This product meets the criteria for an environmentally hazardous material according to

the IMDG Code. See Section 12 for more environmental information.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: This information is not available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

<u>Ingredients</u>	040#	TSCA Inventory		SARA TITLE III: Sec. 302, Extremely	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical		
	CAS#	Inventory	Reportable Quantity(RQ) (40 CFR 117.302):	Hazardous Substance, 40 CFR 355:	Toxic Chemical	de minimus Concentration	
Talc (containing no asbestos fibers)	14807-96-6	Yes	None.	None.	No	N/Ap	
Copper	7440-50-8	Yes	5000 lbs / 2270 kg	None.	Yes	1%	



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SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Specific target organ toxicity, repeated exposure. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

<u>Ingredients</u>	CAS#	California Proposition 65		State "Right to Know" Lists					
	OAO#	Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Talc (containing no asbestos fibers)	14807-96-6	No	N/Ap (talc containing no asbestos)	Yes	Yes	Yes	Yes	Yes	Yes
Copper	7440-50-8	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL). WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

International Information:

Components listed below are present on the following International Inventory list:

Ingredients	CAS#	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Talc (containing no asbestos fibers)	14807-96-6	238-877-9	Present	Present	(1)-468; (1)-468	KE-32773	Present	May be used as a single component chemical under an appropriate group standard.
Copper	7440-50-8	231-159-6	Present	Present	Not listed	KE-08896	Present	HSR002948

SECTION 16. OTHER INFORMATION

Legend

: ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

of 1980

CFR: Code of Federal Regulations CNS: Central Nervous System DOT: Department of Transportation EPA: Environmental Protection Agency

EINECS: European Inventory of Existing Commercial chemical Substances

IARC: International Agency for Research on Cancer

IBC: Intermediate Bulk Container

IMDG: International Maritime Dangerous Goods

Inh: Inhalation

LC: Lethal Concentration LD: Lethal Dose

N/Ap: Not Applicable



References

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N/Av: Not Available

NIOSH: National Institute of Occupational Safety and Health

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PEL: Permissible exposure limit

RCRA: Resource Conservation and Recovery Act

RTECS: Registry of Toxic Effects of Chemical Substances SARA: Superfund Amendments and Reauthorization Act

STEL: Short Term Exposure Limit

TDG: Canadian Transportation of Dangerous Goods Act & Regulations

TLV: Threshold Limit Values TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Identification System

: 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents &

Biological Exposure Indices for 2016

2. International Agency for Research on Cancer Monographs, searched 2017

3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases,

2017(Chempendium, HSDB and RTECs).

4. Material Safety Data Sheets from manufacturer.

5. US EPA Title III List of Lists - 2017 version.

6. California Proposition 65 List - 2017 version.

7. OECD - The Global Portal to Information on Chemical Substances -

eChemPortal,2017.

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Other special considerations for handling

: Provide adequate information, instruction and training for operators.