

SAFETY DATA SHEET

Document Number: SDS-00003

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Identifier:**Product Name:** Kopr-Shield®**Other means of identification:****Product Codes:** See Section 17**Recommended Use:** Lubrication, Greases and Release Products**Recommended Restrictions:** No information available**Manufacturer:****Name:** Thomas & Betts Corp.**Address:** 8155 T&B Blvd
Memphis, TN 38125 USA**Telephone:** 1-901-252-5000 x8234**URL Address:** www.tnb.com**Transportation Emergency:** Chemtrec U.S.: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Skin Sensitization

Category 1

GHS Label elements, including precautionary statements**Emergency Overview****Signal Word****Warning****Hazard Statements**

• May cause an allergic skin reaction



Precautionary Statements

Prevention

- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Contaminated work clothing must not be allowed out of the workplace.
- Wear protective gloves.

Response

- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation or rash occurs: Get medical advice/attention.
- Wash contaminated clothing before reuse.
- Specific treatment (See First Aid, Section 4)

Storage

- None

Disposal

- Dispose of contents/container to an approved waste disposal plant in accordance with local, state and federal regulations.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

0% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

THOMAS AND BETTS KOPR-SHIELD®

Chemical Name	CAS-No	Weight %	Trade secret
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	74869-21-9	65-70	*
Copper	7440-50-8	30-35	*
Zinc, bis(dipentylcarbamodithioato-S,S')-, (T-4)-	15337-18-5	<1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice

Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin Contact	Wash skin with soap and water. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion	Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary
Protection of First-aiders	Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Water spray jet

Specific Hazards Arising from the Chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact

None.

Sensitivity to Static Discharge

None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment. Keep people away from and upwind of spill/leak.

Environmental Precautions

Environmental Precautions Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. Avoid release to the environment.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Small spillage: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Large spillage: Dike far ahead of liquid spill for later disposal. Take up mechanically and collect in suitable container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not breathe vapors or spray mist. In case of insufficient ventilation, wear suitable respiratory equipment. Use only in area provided with appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.
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Conditions for safe storage, including any incompatibilities

Storage	Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place.
Incompatible Products	Acids. Oxidizing agents. Acetylene. Vinyl compounds.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Copper 7440-50-8	TWA: 0.2 mg/m ³ fume	TWA: 0.1 mg/m ³ fume TWA: 1 mg/m ³ dust and mist (vacated) TWA: 0.1 mg/m ³ Cu dust, fume, mist	IDLH: 100 mg/m ³ dust, fume and mist TWA: 1 mg/m ³ dust and mist TWA: 0.1 mg/m ³ fume

Immediately Dangerous to Life or Health. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH:

Other Exposure Guidelines	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).
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Appropriate engineering controls

Engineering Measures	Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Ensure that eyewash stations and safety showers are close to the workstation location. Avoid exceeding of the given occupational exposure limits (see Section 8).
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Safety glasses with side-shields.
Skin and Body Protection	Protective gloves. Lightweight protective clothing.
Respiratory Protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene Measures	When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Semi-fluid (gel)	Appearance	Copper
Odor	Petroleum like	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	Neutral	None known
Melting Point/Range	NONE	None known
Boiling Point/Boiling Range	> 315 °C	None known
Flash Point	> 310 °C	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		

upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Specific Gravity	1.20	None known
Water Solubility	Insoluble in water.	None known
Solubility in other solvents	Largely.	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known

Flammable Properties Not flammable

Explosive Properties No data available

Oxidizing Properties No data available

Other information

VOC Content (%) None

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions. Decomposes in contact with water.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Acids. Oxidizing agents. Acetylene. Vinyl compounds.

Hazardous decomposition products

Metal oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	No known hazard by inhalation.
Eye Contact	No known hazard by eye contact
Skin Contact	No known hazard in contact with skin.
Ingestion	May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
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Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	= 2280 mg/kg (Rat)	-	-
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Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available.
Mutagenic Effects No information available.
Carcinogenicity Contains no ingredients above reportable quantities listed as a carcinogen.

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product

Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 3266 mg/kg; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a severe marine pollutant according to DOT.

Ecotoxicity

Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc. 74869-21-9	>1001 mg/l	LC50 96 h: > 2000 mg/L (Salmo gairdneri)		
Copper 7440-50-8	EC50 96 h: 0.031 - 0.054 mg/L static (Pseudokirchneriella subcapitata) EC50 72 h: 0.0426 - 0.0535 mg/L static (Pseudokirchneriella subcapitata)	LC50 96 h: 0.0068 - 0.0156 mg/L (Pimephales promelas) LC50 96 h: < 0.3 mg/L static (Pimephales promelas) LC50 96 h: = 0.052 mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: = 0.112 mg/L flow-through (Poecilia reticulata) LC50 96 h: = 0.2 mg/L flow-through (Pimephales promelas) LC50 96 h: = 0.3 mg/L semi-static (Cyprinus carpio) LC50 96 h: = 0.8 mg/L static (Cyprinus carpio) LC50 96 h: = 1.25 mg/L static (Lepomis macrochirus)	-	EC50 48 h: = 0.03 mg/L Static (Daphnia magna)

Persistence and Degradability No information available.

Bioaccumulation No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations

Contaminated Packaging Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Copper	Toxic
Zinc, bis(dipentylcarbamodithioato-S,S'), (T-4)-	Toxic

14. TRANSPORT INFORMATION

DOT

UN-Number UN3082
Proper shipping name Environmentally hazardous substances, liquid, n.o.s.
Hazard Class 9
Subsidiary Class
Packing Group III
Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to DOT.
Description UN3082, Environmentally hazardous substances, liquid, n.o.s.(Copper), 9, , III,Marine Pollutant
Emergency Response Guide Number 171

TDG

UN-Number UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.
Hazard Class 9
Packing Group III
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Copper), 9, III,Marine Pollutant

MEX

UN-Number UN3082
Proper Shipping Name Environmentally hazardous substances, liquid, n.o.s.
Hazard Class 9
Packing Group III
Description UN3082 Environmentally hazardous substances, liquid, n.o.s.(Copper), 9, III

ICAO

UN-Number UN3082
Proper shipping name Environmentally hazardous substance, liquid, n.o.s.
Hazard Class 9
Packing Group III
Description UN3082, Environmentally hazardous substance, liquid, n.o.s.(Copper), 9, III

IATA

UN-Number UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.
Hazard Class 9
Packing Group III
ERG Code 9L

Description	UN3082, Environmentally hazardous substance, liquid, n.o.s.(Copper), 9, III
IMDG/IMO	
UN-Number	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
Hazard Class	9
Packing Group	III
EmS No.	F-A, S-F
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s.(Copper), 9, III, Marine Pollutant
RID	
UN-Number	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
Hazard Class	9
Packing Group	III
Classification Code	M6
Description	UN3082 Environmentally hazardous substance, liquid, n.o.s.(Copper), 9, III
ADR	
UN-Number	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
Hazard Class	9
Packing Group	III
Classification Code	M6
Tunnel Restriction Code	(E)
Description	UN3082 Environmentally hazardous substance, liquid, n.o.s.(Copper), 9, III(E)
ADN	
UN-No	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
Hazard Class	9
Packing Group	III
Classification Code	M6
Special Provisions	274, 335, 601
Description	UN3082 Environmentally hazardous substance, liquid, n.o.s.(Copper), 9, III
Hazard Labels	9
Limited Quantity	LQ7

15. REGULATORY INFORMATION

International Inventories

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Copper	7440-50-8	25-30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Copper		X	X	
Zinc, bis(dipentylcarbamodithioato -S,S')-, (T-4)-		X		

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Copper	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Copper	X	X	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 2	Flammability 1	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal Protection X

Issuing Date: 9/10/2015

Revision Date: 9/10/2015

17. SUPPLIMENTRY INFORMATION FROM SECTION 1 – LIST OF PRODUCT CODES/CATALOG NUMBERS

CP8-TB, CP16, CP128, 201-31879, 201-31879-1

General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet