SAFETY DATA SHEET

Issue Date 24-Apr-2015 **Revision Date** 24-Apr-2020 **Version** 1

1. IDENTIFICATION

Product identifier

Product Name Copper Based Anti-Seize 367

Other means of identification

Product Code MS-367
UN/ID no. None
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Adhesives.
Uses advised against None known

Details of the supplier of the safety data sheet

Manufacturer Address
Hernon Manufacturing Inc.
121 Tech Drive
Sanford, FL 32771
800-527-0004

Emergency telephone number

Company Phone Number 407-322-4000
Emergency Telephone Chemtel 800-255-3924

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity	Category 1B

Label elements

Emergency Overview

Danger

Hazard statements
May cause cancer

Appearance No information available **Physical state** Semi-solid paste **Odor** Petroleum distillates

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
May be harmful if swallowed
Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
Lubricating greasesA 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, and/o	74869-21-9	40 - 70	*
GRAPHITE	7782-42-5	10 - 30	*
COPPER	7440-50-8	7 - 13	*
TALC (POWDER)	14807-96-6	1 - 5	*
LIMESTONE	1317-65-3	1 - 5	*
MOLYBDENUM (IV) SULFIDE	1317-33-5	1 - 5	*

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

4. FIRST AID MEASURES

Description of first aid measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash with soap and water. Flush skin with water for several minutes. Remove contaminated clothing and shoes. If irritation develops, seek medical attention. Wash clothing before reuse.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide (CO2). Foam. Dry chemical. Sand. Earth. Water mist.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical
No information available.

Hazardous combustion products Carbon oxides. Oxides of sulfur. Nitrogen oxides (NOx).

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 as required. Ensure adequate ventilation, especially in confined areas.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. See section 12 for additional ecological information.

Methods and material for containment and cleaning up

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

Methods for cleaning up Scrape up as much material as possible. Clean residue with soap and water. Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Ensure adequate ventilation, especially in confined areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep refrigerated at 2°C to 8°C.

Incompatible materials Strong inorganic acids. Strong organic acids. Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
GRAPHITE 7782-42-5	TWA: 2 mg/m^3 respirable particulate matter all forms except graphite fibers	TWA: 15 mg/m^3 total dust synthetic TWA: 5 mg/m^3 respirable fraction synthetic (vacated) TWA: 2.5 mg/m^3 respirable dust natural (vacated) TWA: 10 mg/m^3 total dust synthetic (vacated) TWA: 5 mg/m^3 respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m^3 TWA: 2.5 mg/m^3 natural respirable dust
COPPER 7440-50-8	TWA: 0.2 mg/m^3 fume TWA: 1 mg/m^3 Cu dust and mist	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 IDLH: 100 mg/m^3 Cu dust and mist TWA: 1 mg/m^3 dust and mist TWA: 0.1 mg/m^3 fume TWA: 1 mg/m^3 Cu dust and mist
LIMESTONE 1317-65-3	-	TWA: 15 mg/m^3 total dust TWA: 5 mg/m^3 respirable fraction (vacated) TWA: 15 mg/m^3 total dust (vacated) TWA: 5 mg/m^3 respirable fraction	TWA: 10 mg/m^3 total dust TWA: 5 mg/m^3 respirable dust
TALC (POWDER) 14807-96-6	TWA: 2 mg/m^3 particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	(vacated) TWA: 2 mg/m^3 respirable dust <1% Crystalline silica, containing no Asbestos TWA: 20 mppcf if 1% Quartz or more;use Quartz limit	IDLH: 1000 mg/m^3 TWA: 2 mg/m^3 containing no Asbestos and <1% Quartz respirable dust
MOLYBDENUM (IV) SULFIDE 1317-33-5	TWA: 10 mg/m^3 Mo inhalable particulate matter TWA: 3 mg/m^3 Mo respirable particulate matter	TWA: 15 mg/m^3 total dust (vacated) TWA: 10 mg/m^3 Mo	IDLH: 5000 mg/m^3 Mo

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing. Use rubber or plastic gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Semi-solid paste		
Appearance	No information available	**Odor**	Petroleum distillates
Color	copper bronze	**Odor threshold**	No information available

Property	Values	Remarks • Method
pH	Neutral	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 149 °C / 300 °F	
Flash point	> 221 °C / 430 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	7.0%	
Lower flammability limit:	0.9%	
Vapor pressure	< 0.01 kPa	
Vapor density	> 5	
Relative density	1.15	
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Incompatible materials.

Incompatible materials
Strong inorganic acids. Strong organic acids. Oxidizing agents.

Hazardous Decomposition Products
Hydrocarbons. Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	No data available.
Eye contact	No data available.

Skin contact No data available.
Ingestion No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Lubricating greasesA 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, and/o 74869-21-9	= 2280 mg/kg (Rat)	-	-
GRAPHITE 7782-42-5	-	-	> 2000 mg/m^3 (Rat) 4 h
MOLYBDENUM (IV) SULFIDE 1317-33-5	-	-	> 2820 mg/m^3 (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ cell mutagenicity No information available.

Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
TALC (POWDER) 14807-96-6	-	Group 3	-	X

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 Information

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral) 2,280.00 mg/kg mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Lubricating greasesA 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, and/o 74869-21-9	-	2000: 96 h Salmo gairdneri mg/L LC50	-
GRAPHITE 7782-42-5	-	100: 96 h Danio rerio mg/L LC50 semi-static	-
COPPER 7440-50-8	0.031 - 0.054: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.0426 - 0.0535: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	0.0068 - 0.0156: 96 h Pimephales promelas mg/L LC50 0.3: 96 h Pimephales promelas mg/L LC50 static 0.052: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.112: 96 h Poecilia reticulata mg/L LC50 flow-through 0.2: 96 h Pimephales promelas mg/L LC50 flow-through 0.3: 96 h Cyprinus carpio mg/L LC50 semi-static 0.8:	0.03: 48 h Daphnia magna mg/L EC50 Static

		96 h Cyprinus carpio mg/L LC50 static 1.25: 96 h Lepomis macrochirus mg/L LC50 static	
TALC (POWDER) 14807-96-6	-	100: 96 h Brachydanio rerio g/L LC50 semi-static	-

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

Chemical Name	California Hazardous Waste Status
COPPER 7440-50-8	Toxic

14. TRANSPORT INFORMATION

DOT
- **UN/ID no.** None
- **Proper shipping name** Not regulated
- **Hazard Class** None
- **Packing Group** None
- **Special Provisions** None

IATA
- **UN/ID no.** None
- **Proper shipping name** Not regulated
- **Hazard Class** None
- **Packing Group** None
- **Special Provisions** None

IMDG
- **UN/ID no.** None
- **Proper shipping name** Not regulated
- **Hazard Class** None
- **Packing Group** None
- **Special Provisions** None

15. REGULATORY INFORMATION

International Inventories
- **TSCA** Complies
- **DSL/NDSL** Complies
- **EINECS/ELINCS** Complies
- **ENCS** Complies
- **IECSC** Complies
- **KECL** Complies

PICCS	Complies
AICS	Complies

All ingredients are on the inventory or are exempt from listing.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

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	SARA 313 - Threshold Values %
COPPER - 7440-50-8	1.0

SARA 311/312 Hazard Categories

Acute health hazard	-
Chronic Health Hazard	-
Fire hazard	-
Sudden release of pressure hazard	-
Reactive Hazard	-

CWA (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 7440-50-8	-	X	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	CERCLA/SARA RQ	Reportable Quantity (RQ)
COPPER 7440-50-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
GRAPHITE 7782-42-5	X	X	X
COPPER 7440-50-8	X	X	X
LIMESTONE 1317-65-3	X	X	X

TALC (POWDER) 14807-96-6	X	X	X
MOLYBDENUM (IV) SULFIDE 1317-33-5	-	X	-

U.S. EPA Label Information
EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health hazards** -	**Flammability** -	**Instability** -	**Physical and Chemical Properties** -
HMIS	**Health hazards** -	**Flammability** -	**Physical hazards** -	**Personal protection** -

Prepared By SDS coordinator
Issue Date 24-Apr-2015
Revision Date 24-Apr-2020
Revision Note No information available

Disclaimer
The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet