SAFETY DATA SHEET

Revision date 21-Mar-2024 **Revision Number** 1

1. Identification

Product identifier

Product Name API MODIFIED CN WG

Other means of identification

Product Code(s) 613337

UN number or ID number UN3077

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Lubricant and sealant used for threaded connections

Restrictions on use Do not use on oxygen lines or in oxygen enriched atmospheres.

Details of the supplier of the safety data sheet

Manufacturer Address
Bestolife Corporation
2126 Vanco Drive
Irving TX 75061
855-243-9164/972-865-8961
Telefax 214-631-3047

Emergency telephone number

Emergency Telephone CHEMTREC U.S.: 800-424-9300, International +1 703-527-3887 (24-hours/7 days)

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Carcinogenicity	Category 1B
Reproductive toxicity	Category 1A
Effects on or via lactation	Yes
Aspiration hazard	Category 1

Appearance Viscous semi-solid **Physical state** Solid **Odor** Petroleum

Label elements

Danger

Hazard statements
Harmful if swallowed
May cause cancer
May damage fertility or the unborn child
May cause harm to breast-fed children

May be fatal if swallowed and enters airways

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves, protective clothing, eye protection and face protection
Do not breathe dusts or mists
Avoid contact during pregnancy and while nursing
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
Ingestion
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
Rinse mouth

Precautionary Statements - Storage
Store locked up
Precautionary Statements - Disposal
Dispose of contents and container to an approved waste disposal plant

Other information
May be harmful in contact with skin. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

Unknown acute toxicity
57.79777 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Lead	7439-92-1	>= 30 - < 50	-	-
Graphite	7782-42-5	>= 10 - < 20	-	-
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 10 - < 20	-	-
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	>= 10 - < 20	-	-
Zinc	7440-66-6	>= 10 - < 20	-	-
Copper metal powder	7440-50-8	>= 1 - < 5	-	-
Talc	14807-96-6	>= 1 - < 5	-	-
Calcium oxide	1305-78-8	>= 1 - < 5	-	-
Quartz	14808-60-7	>= 1 - < 5	-	-
Zinc oxide	1314-13-2	>= 0 - < 1.0	-	-

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

Additional information

NOTE: As per Note L, the carcinogen classification does NOT apply to this preparation because the producer of "Petroleum distillates, hydrotreated heavy naphthenic" declares that it contains less than 3% DMSO extractable material by IP-346

These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. Immediate medical attention is required.

Inhalation Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical attention. Delayed pulmonary edema may occur.

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

Skin contact Wash skin with soap and water.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

Indication of any immediate medical attention and special treatment needed

Note to physicians Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical, CO2, water spray or alcohol-resistant foam.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

precautions for fire-fighters Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

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 Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep in properly labeled containers. Store in accordance with the particular national regulations.

8. Exposure controls/personal protection

Control parameters
Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Lead 7439-92-1	TWA: 0.05 mg/m³	TWA: 50 µg/m³	IDLH: 100 mg/m³ TWA: 0.050 mg/m³
Graphite 7782-42-5	TWA: 2 mg/m³ respirable particulate matter all forms except graphite fibers	TWA: 15 mg/m³ total dust synthetic TWA: 5 mg/m³ respirable fraction synthetic TWA: 15 mppcf respirable dust natural (vacated) TWA: 2.5 mg/m³ respirable dust natural (vacated) TWA: 10 mg/m³ total dust synthetic (vacated) TWA: 5 mg/m³ respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m³ TWA: 2.5 mg/m³ natural respirable dust
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	TWA: 5 mg/m³ inhalable particulate matter excluding metal working fluids, highly &	TWA: 5 mg/m³ (vacated) TWA: 5 mg/m³	IDLH: 2500 mg/m³ TWA: 5 mg/m³ STEL: 10 mg/m³

	severely refined		
Copper metal powder 7440-50-8	TWA: 0.2 mg/m³ fume	TWA: 0.1 mg/m³ fume TWA: 1 mg/m³ dust and mist (vacated) TWA: 0.1 mg/m³ Cu dust, fume, mist	IDLH: 100 mg/m³ dust, fume and mist TWA: 1 mg/m³ dust and mist TWA: 0.1 mg/m³ fume
Talc 14807-96-6	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 20 mppcf if 1% Quartz or more, use Quartz limit (vacated) TWA: 2 mg/m³ respirable dust <1% Crystalline silica, containing no Asbestos TWA: 20 mppcf if 1% Quartz or more, use Quartz limit	IDLH: 1000 mg/m³ TWA: 2 mg/m³ containing no Asbestos and <1% Quartz respirable dust
Calcium oxide 1305-78-8	TWA: 2 mg/m³	TWA: 5 mg/m³ (vacated) TWA: 5 mg/m³ not in effect as a result of reconsideration	IDLH: 25 mg/m³ TWA: 2 mg/m³
Quartz 14808-60-7	TWA: 0.025 mg/m³ respirable particulate matter	TWA: 50 µg/m³ (vacated) TWA: 0.1 mg/m³ respirable dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust
Zinc oxide 1314-13-2	STEL: 10 mg/m³ respirable particulate matter TWA: 2 mg/m³ respirable particulate matter	TWA: 5 mg/m³ fume TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 5 mg/m³ fume (vacated) TWA: 10 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction (vacated) STEL: 10 mg/m³ fume	IDLH: 500 mg/m³ Ceiling: 15 mg/m³ dust TWA: 5 mg/m³ dust and fume STEL: 10 mg/m³ fume

Chemical name	Alberta	British Columbia	Ontario	Quebec
Lead 7439-92-1	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³ Adverse reproductive effect	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³
Graphite 7782-42-5	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	TWA: 5 mg/m³ STEL: 10 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 5 mg/m³ TWA:	TWA: 5 mg/m³ STEL: 10 mg/m³
Copper metal powder 7440-50-8	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 1 mg/m³ TWA: 0.2 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³
Talc 14807-96-6	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³
Calcium oxide 1305-78-8	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³
Quartz 14808-60-7	TWA: 0.025 mg/m³	TWA: 0.025 mg/m³	TWA: 0.10 mg/m³	TWA: 0.1 mg/m³
Zinc oxide 1314-13-2	TWA: 2 mg/m³ STEL: 10 mg/m³	TWA: 2 mg/m³ STEL: 10 mg/m³	TWA: 2 mg/m³ STEL: 10 mg/m³	TWA: 2 mg/m³ STEL: 10 mg/m³

Other information

These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard

Biological occupational exposure limits

Chemical name	ACGIH
Lead 7439-92-1	200 µg/L - blood (Lead) - not critical

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection Wear suitable gloves. PPE16 - Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training.

Skin and body protection Wear suitable protective clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use appropriate respiratory protection.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash before reuse. Wear suitable gloves and eye/face protection.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Viscous semi-solid
Color	black copper
Odor	Petroleum
Odor threshold	

Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	162.8 °C / 325.0 °F	Method ASTM D 92, Cleveland open cup Distillates (petroleum), hydrotreated heavy naphthenic
Evaporation rate		None known
Flammability		None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure		None known
Relative vapor density	No data available	None known
Relative density	1.9	None known
Water solubility	Negligible	None known
Solubility(ies)		None known
Partition coefficient		None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity		None known

Dynamic viscosity None known

Other information

Explosive properties No information available
Oxidizing properties No information available
VOC content No information available

10. Stability and reactivity

Reactivity Not classified as a reactivity hazard.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions Can react with strong oxidizing agents.

Conditions to avoid None known based on information supplied.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. May cause irritation.

Skin contact Repeated exposure may cause skin dryness or cracking. May be harmful in contact with skin.

Ingestion Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral) 1,420.30 mg/kg
ATEmix (dermal) 2,380.50 mg/kg
ATEmix (inhalation-dust/mist) 349.1329 mg/l

Unknown acute toxicity

57.79777 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Graphite 7782-42-5	-	-	> 2000 mg/m³ (Rat) 4 h
Distillates (petroleum), hydrotreated light naphthenic	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2180 mg/m³ (Rat) 4 h

64742-53-6			
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Zinc 7440-66-6	= 630 mg/kg (Rat)	-	-
Copper metal powder 7440-50-8	-	-	> 5.11 mg/L (Rat) 4 h
Calcium oxide 1305-78-8	= 500 mg/kg (Rat)	-	> 6.04 mg/L (Rat) 4 h
Zinc oxide 1314-13-2	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 5700 mg/m³ (Rat) 4 h

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	A3	Group 2A	Reasonably Anticipated	X
Distillates (petroleum), hydrotreated light naphthenic 64742-53-6	A2	Group 1	Known	X
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	A2	Group 1	Known	X
Talc 14807-96-6	-	Group 3	-	X
Quartz 14808-60-7	A2	Group 1	Known	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans
NTP (National Toxicology Program)
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child. May cause harm to breast-fed

children.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Gastrointestinal tract (GI), Central Vascular System (CVS), Lungs, Gingival Tissue.

Aspiration hazard May be fatal if swallowed and enters airways.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Lead 7439-92-1	-	LC50: =0.44mg/L (96h, Cyprinus carpio) LC50: =1.17mg/L (96h, Oncorhynchus mykiss) LC50: =1.32mg/L (96h, Oncorhynchus mykiss)	-	EC50: =600µg/L (48h, water flea)
Graphite 7782-42-5	-	LC50: >100mg/L (96h, Danio rerio)	-	-
Distillates (petroleum), hydrotreated light naphthenic 64742-53-6	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Zinc 7440-66-6	EC50: 0.11 - 0.271mg/L (96h, Pseudokirchneriella subcapitata) EC50: 0.09 - 0.125mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 2.16 - 3.05mg/L (96h, Pimephales promelas) LC50: 0.211 - 0.269mg/L (96h, Pimephales promelas) LC50: =2.66mg/L (96h, Pimephales promelas) LC50: =30mg/L (96h, Cyprinus carpio) LC50: =0.45mg/L (96h, Cyprinus carpio) LC50: =7.8mg/L (96h, Cyprinus carpio) LC50: =3.5mg/L (96h, Lepomis macrochirus) LC50: =0.24mg/L (96h, Oncorhynchus mykiss) LC50: =0.59mg/L (96h, Oncorhynchus mykiss) LC50: =0.41mg/L (96h, Oncorhynchus mykiss)	-	EC50: 0.139 - 0.908mg/L (48h, Daphnia magna)
Copper metal powder 7440-50-8	EC50: 0.0426 - 0.0535mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 0.0068 - 0.0156mg/L (96h, Pimephales promelas) LC50: <0.3mg/L (96h,	-	EC50: =0.03mg/L (48h, Daphnia magna)

	EC50: 0.031 - 0.054mg/L (96h, Pseudokirchneriella subcapitata)	Pimephales promelas) LC50: =0.2mg/L (96h, Pimephales promelas) LC50: =0.052mg/L (96h, Oncorhynchus mykiss) LC50: =1.25mg/L (96h, Lepomis macrochirus) LC50: =0.3mg/L (96h, Cyprinus carpio) LC50: =0.8mg/L (96h, Cyprinus carpio) LC50: =0.112mg/L (96h, Poecilia reticulata)		
Talc 14807-96-6	-	LC50: >100g/L (96h, Brachydanio rerio)	-	-
Calcium oxide 1305-78-8	-	LC50: =1070mg/L (96h, Cyprinus carpio)	-	-
Zinc oxide 1314-13-2	-	LC50: =1.55mg/L (96h, Danio rerio)	-	-

Persistence and degradability

Bioaccumulation There is no data for this product.

Mobility in soil

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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

14. Transport information

Remarks DG for domestic (ground) transport applies to containers over 119 gallons or 450 litres.

IMDG Clause 2.10.2.7 / IATA Special Provision A197: Marine pollutants or dangerous goods packaged in single or combination packages containing a net quantity per single or inner package of 5 L or less for liquids or 5 kg for solids are not subject to any other transport regulations, provided the packaging meets general provisions.

DOT

UN number or ID number UN3077
Proper shipping name Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es) 9
Packing group III
Reportable quantity - lbs Lead: RQ (lb)= 10, Zinc: RQ (lb)= 1000.00
Reportable quantity lbs. (calculated) Lead: RQ (lb)= 33.00, Zinc: RQ (lb)= 8110.00

Reportable Quantity (RQ)	(Lead: RQ (kg)= 4.54, Zinc: RQ (kg)= 454.00)
Reportable quantity kg (calculated)	Lead: RQ (kg)= 15.00, Zinc: RQ (kg)= 3682.00
DOT Marine Pollutant	PP
Marine pollutant	Lead, Copper metal powder
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III, Marine pollutant
Special Provisions	8, 146, 335, 384, 441, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33
Emergency Response Guide Number	171

TDG

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Special Provisions	16, 99
Marine pollutant name	Lead, Copper metal powder.
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III

MEX

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III
Special Provisions	274, 331, 335

ICAO (air)

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III
Special Provisions	A97, A158, A179, A197, A215

IATA

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
ERG Code	9L
Special Provisions	A97, A158, A179, A197, A215
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III

IMDG

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
EmS-No	F-A, S-F
Special Provisions	274, 335, 966, 967, 969
Marine pollutant	P
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III, Marine pollutant

RID

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9

Packing group	III
Classification code	M7
Special Provisions	274, 335, 375, 601
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III

ADR

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Classification code	M7
Tunnel restriction code	(-)
Special Provisions	274, 335, 601, 375
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III, (-)

ADN

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Classification code	M7
Special Provisions	274, 335, 375, 601
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III
Equipment Requirements	A, PP

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

Chemical name	CAS No.	Inventory Listing Status	Commercial Activity Designation
Lead	7439-92-1	Present	Active
Graphite	7782-42-5	Present	Active
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	Present	Active
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Present	Active
Zinc	7440-66-6	Present	Active
Copper metal powder	7440-50-8	Present	Active
Calcium(2+) 12-hydroxyoctadecanoate	3159-62-4	Present	Active
Talc	14807-96-6	Present	Active
Calcium oxide	1305-78-8	Present	Active
Quartz	14808-60-7	Present	Active
Zinc oxide	1314-13-2	Present	Active
Magnesium oxide	1309-48-4	Present	Active

Chemical name	CAS No.	Inventory Listing Status	Commercial Activity Designation
Stearic acid	57-11-4	Present	Active
Iron	7439-89-6	Present	Active
Cadmium	7440-43-9	Present	Active

DSL/NDSL All components of this product are on the Canadian DSL.
EINECS/ELINCS Contact supplier for inventory compliance status.
ENCS Contact supplier for inventory compliance status.
IECSC Contact supplier for inventory compliance status.
KECI Contact supplier for inventory compliance status.
PICCS Contact supplier for inventory compliance status.
AIIC All components are listed on AICIS, or are exempt.
NZIoC Contact supplier for inventory compliance status.

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
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

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 %
Lead - 7439-92-1	0.1
Zinc - 7440-66-6	1.0
Copper metal powder - 7440-50-8	1.0
Zinc oxide - 1314-13-2	1.0

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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
Lead 7439-92-1	-	X	X	-
Zinc 7440-66-6	-	X	X	-
Copper metal powder 7440-50-8	-	X	X	-
Zinc oxide 1314-13-2	-	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	Reportable Quantity (RQ)

		Substances RQs	
Lead 7439-92-1	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
Zinc 7440-66-6	1000 lb	-	RQ 454 kg final RQ RQ 1000 lb final RQ
Copper metal powder 7440-50-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen Developmental Female Reproductive Male Reproductive
Quartz - 14808-60-7	Carcinogen
Cadmium - 7440-43-9	Carcinogen Developmental Male Reproductive

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Lead 7439-92-1	X	X	X
Graphite 7782-42-5	X	X	X
Distillates (petroleum), hydrotreated light naphthenic 64742-53-6	-	X	-
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	X	X	X
Zinc 7440-66-6	X	X	X
Copper metal powder 7440-50-8	X	X	X
Talc 14807-96-6	X	X	X
Calcium oxide 1305-78-8	X	X	X
Quartz 14808-60-7	X	X	X
Zinc oxide 1314-13-2	X	X	X
Magnesium oxide 1309-48-4	X	X	X
Cadmium 7440-43-9	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	**Health hazards** 2	**Flammability** 1	**Instability** 0	**Special hazards** -
HMIS	**Health hazards** 2 *	**Flammability** 1	**Physical hazards** 0	**Personal protection** X

Chronic Hazard Star Legend ** = Chronic Health Hazard*

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Revision Note

Disclaimer

The information provided in this 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