

COPR PLUS PUMPABLE

Version Revision Date: SDS Number: Date of last issue: 06/13/2016 5.2 11/02/2016 118929-00010 Date of first issue: 05/18/2015

SECTION 1. IDENTIFICATION

Product name : COPR PLUS PUMPABLE

SDS-Identcode : 442G

Manufacturer or supplier's details

Company name of supplier : Bestolife Corporation

Address : 2777 N. Stemmons Frwy Ste 1800

Dallas TX 75207,

Telephone : 855-243-9164/972-865-8961

Telefax : 214-631-3047

E-mail address : www.bestolife.com

Recommended use of the chemical and restrictions on use

Recommended use : Industrial use

Thread Compound (Pipe Dope) and Jacking grease for use in

Offshore industries

Mining, (without offshore industries)

Restrictions on use : Do not use on oxygen lines or in oxygen enriched

atmospheres.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Eye irritation : Category 2A

GHS label elements

Hazard pictograms



Signal Word : Warning

Hazard Statements : H319 Causes serious eye irritation.

Precautionary Statements : Prevention:

P264 Wash skin thoroughly after handling. P280 Wear eye protection/ face protection.

Response:





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> P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ atten-

tion.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture Mixture

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated light naph-	64742-53-6	>= 20 - < 30
thenic		
Graphite	7782-42-5	>= 10 - < 20
Copper metal powder	7440-50-8	>= 10 - < 20
Talc	14807-96-6	>= 5 - < 10
Calcium oxide	1305-78-8	>= 5 - < 10
Quartz	14808-60-7	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice In the case of accident or if you feel unwell, seek medical

advice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed If swallowed, DO NOT induce vomiting.

> Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and

delayed

Causes serious eye irritation.





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Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment

when the potential for exposure exists.

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

Specific hazards during fire

fighting

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

Carbon oxides Metal oxides

Silicon oxides

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Special protective equipment:

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec: :

tive equipment and emer-

gency procedures

Use personal protective equipment.

Follow safe handling advice and personal protective

equipment recommendations.

Environmental precautions : Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable

container for disposal.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items

employed in the cleanup of releases. You will need to

determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.





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SECTION 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Advice on safe handling : Do not get on skin or clothing.

Do not swallow. Do not get in eyes.

Handle in accordance with good industrial hygiene and safety

practice.

Keep container tightly closed.

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage : Keep in properly labeled containers.

Keep tightly closed.

Keep in a cool, well-ventilated place.

Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:

Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	TWA (Mist)	5 mg/m³	CA AB OEL
		STEL (Mist)	10 mg/m³	CA AB OEL
		TWAEV (Mist)	5 mg/m³	CA QC OEL
		STEV (Mist)	10 mg/m ³	CA QC OEL
		TWA (Mist)	1 mg/m³	CA BC OEL
		TWA (Inhal-	5 mg/m³	ACGIH
		able fraction)		
Graphite	7782-42-5	TWA (Res- pirable)	2 mg/m³	CA BC OEL
		TWA (Respirable)	2 mg/m³	CA AB OEL
		TWAEV (Respirable fibres)	5 mg/m³	CA QC OEL
		TWAEV (To- tal fibres)	10 mg/m³	CA QC OEL
		TWAEV (respirable dust)	2 mg/m³	CA QC OEL
		TWA (Respirable frac-	2 mg/m³	ACGIH



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	1	tion)	1	1
Copper metal powder	7440-50-8	TWA	0.2 mg/m ³	CA AB OEL
		(Fumes)		
		TWA (Dust	1 mg/m³	CA AB OEL
		and mist)	(Copper)	
		TWAEV	1 mg/m³	CA QC OEL
		(dusts and	(Copper)	
		mists)		
		TWAEV	0.2 mg/m ³	CA QC OEL
		(Fumes)	(Copper)	
		TWA (Dust	1 mg/m³	CA BC OEL
		and mists)	(Copper)	
		TWA	0.2 mg/m ³	CA BC OEL
		(Fumes)	(Copper)	
		TWA (Dust	1 mg/m³	ACGIH
		and mist)	(Copper)	
		TWA	0.2 mg/m ³	ACGIH
		(Fumes)	(Copper)	
Talc	14807-96-6	TWAEV	3 mg/m³	CA QC OEL
		(respirable		
		dust)		
		TWA (Res-	2 mg/m³	CA AB OEL
		pirable par-		
		ticulates)		
		TWA (Res-	2 mg/m³	CA BC OEL
		pirable)		
		TWA	2 fibre/cm3	CA ON OEL
		TWA (Res-	2 mg/m³	CA ON OEL
		pirable frac-		
		tion)		
		TWA (Res-	2 mg/m³	ACGIH
		pirable frac-		
		tion)		
Calcium oxide	1305-78-8	TWA	2 mg/m³	CA AB OEL
		TWA	2 mg/m³	CA BC OEL
		TWAEV	2 mg/m³	CA QC OEL
		TWA	2 mg/m³	ACGIH
Quartz	14808-60-7	TWA (Res-	0.1 mg/m ³	CA ON OEL
		pirable frac-		
		tion)		
		TWA (Res-	0.025 mg/m ³	CA AB OEL
		pirable par-		
		ticulates)		
		TWAEV	0.1 mg/m ³	CA QC OEL
		(respirable		
		dust)		
		TWA (Res-	0.025 mg/m ³	CA BC OEL
		pirable)	(Silica)	
		TWA (Res-	0.025 mg/m ³	ACGIH
		pirable frac-	(Silica)	
		tion)		

Engineering measures : Minimize workplace exposure concentrations.





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> Dust formation may be relevant in the processing of this product. In addition to substance-specific OELs, general limitations of concentrations of particulates in the air at workplaces have to be considered in workplace risk assessment. Relevant limits include: OSHA PEL for Particulates Not Otherwise Regulated of 15 mg/m3 - total dust, 5 mg/m3 - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m3 - respirable particles, 10 mg/m3 inhalable particles.

Personal protective equipment

Respiratory protection Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Combined particulates and organic vapor type Filter type

Hand protection

Material Chemical-resistant gloves

Remarks Choose gloves to protect hands against chemicals depending

> on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before

breaks and at the end of workday.

Eye protection Wear the following personal protective equipment:

Safety goggles

Skin and body protection Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Hygiene measures Ensure that eye flushing systems and safety showers are

> located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Viscous semi-solid

Color copper

Odor Petroleum

Odor Threshold No data available



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pH : Not applicable (not an aqueous solution)

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapor pressure : Not applicable

Relative vapor density : Not applicable

Relative density : 1.2

Density : No data available

Solubility(ies)

Water solubility : negligible

Partition coefficient: n-

octanol/water

Not applicable

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : Not applicable

Flow time : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available

Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.



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Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Can react with strong oxidizing agents.

Conditions to avoid : None known.

Incompatible materials : Oxidizing agents

Hazardous decomposition

products

No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Graphite:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 401

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat): > 2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Copper metal powder:



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Acute oral toxicity : LD50 (Rat): > 2,500 mg/kg

Method: OECD Test Guideline 423

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat): > 5.11 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 436

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Talc:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Remarks: Based on data from similar materials

Calcium oxide:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 425

Assessment: The substance or mixture has no acute oral tox-

icity

Acute dermal toxicity : LD50 (Rabbit): > 2,500 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on data from similar materials

Quartz:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Species: Rabbit

Result: No skin irritation

Graphite:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Copper metal powder:



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Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Talc:

Species: Rabbit

Result: No skin irritation

Calcium oxide:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Skin irritation

Remarks: Based on data from similar materials

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Result: Irritation to eyes, reversing within 21 days

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Species: Rabbit

Result: No eye irritation

Graphite:

Species: Rabbit

Result: No eye irritation

Copper metal powder:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

Talc:

Species: Rabbit

Result: No eye irritation

Calcium oxide:

Species: Rabbit

Result: Irreversible effects on the eye Method: OECD Test Guideline 405

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.



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Respiratory sensitization

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Test Type: Buehler Test

Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Graphite:

Test Type: Local lymph node assay (LLNA)

Routes of exposure: Skin contact

Species: Mouse Result: negative

Copper metal powder:

Test Type: Maximization Test Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Talc:

Routes of exposure: Skin contact

Species: Humans Result: negative

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection Method: OECD Test Guideline 474

Result: negative

Graphite:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative



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Copper metal powder:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion

Method: Directive 67/548/EEC, Annex V, B.12.

Result: negative

Remarks: Based on data from similar materials

Talc:

Genotoxicity in vitro : Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro)

Result: negative

Genotoxicity in vivo : Test Type: Chromosome aberration test in vitro

Species: Rat

Application Route: Ingestion

Result: negative

Calcium oxide:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Carcinogenicity

Not classified based on available information.

Product:

Carcinogenicity - Assess-

ment

Petroleum distillates have been classified as not carcinogenic

based on DMSO extract content < 3% (Regulation (EC)

1272/2008, Annex VI, Part 3, Note L).

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Species: Mouse

Application Route: Skin contact Exposure time: 78 weeks

Result: negative

Talc:

Species: Mouse

Application Route: inhalation (dust/mist/fume)

Exposure time: 2 Years

Result: negative



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Calcium oxide:

Species: Rat

Application Route: Ingestion Exposure time: 104 weeks

Result: negative

Remarks: Based on data from similar materials

Quartz:

Species: Humans

Application Route: inhalation (dust/mist/fume)

Result: positive

Remarks: IARC: (International Agency for Research on Cancer)

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

dust inhalation hazard.

Reproductive toxicity

Not classified based on available information.

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening

test

Species: Rat

Application Route: Ingestion

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Skin contact

Result: negative

Graphite:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Copper metal powder:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion

Result: negative



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Remarks: Based on data from similar materials

Test Type: Embryo-fetal development Effects on fetal development

Species: Rabbit

Application Route: Ingestion

Result: negative

Talc:

Effects on fetal development Test Type: Embryo-fetal development

Species: Rat

Application Route: Ingestion

Result: negative

Calcium oxide:

Effects on fetal development Test Type: Embryo-fetal development

Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 414

Result: negative

STOT-single exposure

Not classified based on available information.

Ingredients:

Calcium oxide:

Assessment: May cause respiratory irritation.

Remarks: These substance(s) are inextricably bound in the product and therefore do not contrib-

ute to a dust inhalation hazard.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Species: Rabbit NOAEL: 1,000 mg/kg

Application Route: Skin contact Exposure time: 4 Weeks

Method: OECD Test Guideline 410

Graphite:

Species: Rat NOAEL: 12 mg/m3

Application Route: inhalation (dust/mist/fume)

Exposure time: 28 Days

Method: OECD Test Guideline 412



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Copper metal powder:

Species: Rat

NOAEL: $>= 2 \text{ mg/m}^3$

Application Route: inhalation (dust/mist/fume)

Exposure time: 28 Days

Quartz:

Species: Humans LOAEL: 0.053 mg/m³

Application Route: inhalation (dust/mist/fume)

Remarks: These substance(s) are inextricably bound in the product and therefore do not

contribute to a dust inhalation hazard.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 10,250 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 15,470 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

EC50 (Daphnia magna (Water flea)): 30,940 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 70,100

mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

NOEC (Selenastrum capricornutum (green algae)): 60,000

mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l



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Exposure time: 96 h

Test substance: Water Accommodated Fraction

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 48 h

Test substance: Water Accommodated Fraction

Toxicity to algae : NOELR (Pseudokirchneriella subcapitata (green algae)): >=

100 mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 10 mg/l

Exposure time: 21 d

Toxicity to microorganisms : NOEC (Photobacterium phosphoreum): > 2.17 mg/l

Exposure time: 4 d

Graphite:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50: > 1,012.5 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Copper metal powder:

Toxicity to fish : LC50: > $10 - 100 \mu g/l$

Exposure time: 96 h

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to fish (Chronic tox-

icity)

NOEC: > 1 - 10 μg/l

M-Factor (Chronic aquatic

toxicity)

: 10

Talc:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 100,000 mg/l

Exposure time: 24 h



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Calcium oxide:

LC50 (Gasterosteus aculeatus (threespine stickleback)): 457 Toxicity to fish

ma/l

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

LC50: 158 mg/l Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to algae EC50 (Pseudokirchneriella subcapitata (green algae)): 184.57

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

NOEC (Pseudokirchneriella subcapitata (green algae)): 48

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC: 32 mg/l Exposure time: 12 d

Remarks: Based on data from similar materials

Toxicity to microorganisms EC50: 300.4 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

Quartz:

Ecotoxicology Assessment

Acute aquatic toxicity No toxicity at the limit of solubility.

Chronic aquatic toxicity No toxicity at the limit of solubility.

Persistence and degradability

Product:

Biodegradability Result: Readily biodegradable.

Remarks: Based on data from similar materials

Ingredients:

Distillates (petroleum), hydrotreated light naphthenic:

Biodegradability Result: Not readily biodegradable.

> Biodegradation: 2 - 8 % Exposure time: 28 d

Method: OECD Test Guideline 301B



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Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste

handling site for recycling or disposal.

Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or

death.

If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number UN 3077

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Copper metal powder, Antimony, dialkyl dithiocarbamate)

Class 9 Ш Packing group Labels 9

IATA-DGR

UN/ID No. **UN 3077**

Environmentally hazardous substance, solid, n.o.s. Proper shipping name

(Copper metal powder, Antimony, dialkyl dithiocarbamate)

Class 9 Packing group Ш

Miscellaneous Labels

Packing instruction (cargo

aircraft)

Packing instruction (passen-

956

ger aircraft)

IMDG-Code

UN number UN 3077

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

956

(Copper metal powder, Antimony, dialkyl dithiocarbamate)

Class



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Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

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

Not applicable for product as supplied.

Domestic regulation

TDG

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Copper metal powder, Antimony, dialkyl dithiocarbamate)

Class : 9
Packing group : III
Labels : 9
ERG Code : 171

Marine pollutant : yes(Copper metal powder, Antimony, dialkyl dithiocarbamate)

SECTION 15. REGULATORY INFORMATION

The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

TSCA : All chemical substances in this product are either listed on the

TSCA Inventory or are in compliance with a TSCA Inventory

exemption.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table

2: OEL)

CA BC OEL : Canada. British Columbia OEL

CA ON OEL : Ontario Table of Occupational Exposure Limits made under

the Occupational Health and Safety Act.

CA QC OEL : Québec. Regulation respecting occupational health and safe-

ty, Schedule 1, Part 1: Permissible exposure values for air-

borne contaminants

ACGIH / TWA : 8-hour, time-weighted average
CA AB OEL / TWA : 8-hour Occupational exposure limit
CA AB OEL / STEL : 15-minute occupational exposure limit

CA BC OEL / TWA : 8-hour time weighted average

CA ON OEL / TWA : Time-Weighted Average Limit (TWA)
CA QC OEL / TWAEV : Time-weighted average exposure value

CA QC OEL / STEV : Short-term exposure value

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada);



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ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC -No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS -Workplace Hazardous Materials Information System

Sources of key data used to compile the Material Safety

Data Sheet

: Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

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Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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