

Conforms: GHS (rev 4) (2011)

(This Safety Data Sheet conforms to the requirements of the Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012.) - United States

Date of issue/ Date of revision : 08/24/2018
Date of previous issue : 11/15/2017
Version : 2.1



SAFETY DATA SHEET

YaraVita Procote BCMZ

Section 1. Identification

Product identifier : YaraVita Procote BCMZ
Product type : liquid (Suspension)
Product code : PYPBVL

Uses

Area of application : Professional applications
Material uses : Fertilizers.

Supplier

Supplier's details : Yara North America, Inc.

Address

Street : 100 North Tampa Street, Suite 3200
Postal code : 33602
City : TAMPA
Country : United States

Telephone number : +1 813 222 5700
Fax no. : +1 813 875 5735
e-mail address of person : yna-hesq@yara.com
responsible for this SDS

Emergency telephone number : US: Chemtrec 24-hours Emergency Response: 1-800-424-9300
(with hours of operation) : Canada: 24 Hour Emergency Service, (Canutec 613-996-6666)

National advisory body/Poison Center

Name : The National Poisons Emergency number
Telephone number : 1 800 222 1222

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture. : SERIOUS EYE DAMAGE - Category 1
TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 2

GHS label elements**Hazard pictograms****Signal word**

: Danger

Hazard statements

: H318 Causes serious eye damage.
 H361 Suspected of damaging fertility or the unborn child.
 H400 Very toxic to aquatic life.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements**Prevention**

: P202 Do not handle until all safety precautions have been read and understood.
 P280-d Wear protective gloves/clothing and eye/face protection.

Response

: P391 Collect spillage.
 P308 IF exposed or concerned:
 P313-a Get medical attention.
 P305 IF IN EYES:
 P351 Rinse cautiously with water for several minutes.
 P338 Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor/physician.

Hazards not otherwise classified

: None.

Section 3. Composition/information on ingredients**Substance/mixture**

: Mixture

Ingredient name	CAS number	%
Boron calcium oxide (B ₆ Ca ₂ O ₁₁), hydrate (1:5)	12291-65-5	>= 25 - < 30
Zinc oxide (ZnO)	1314-13-2	>= 12.5 - < 15
Copper oxide (Cu ₂ O)	1317-39-1	>= 5 - < 7
Ulexite (CaNaH ₁₂ (BO ₃) ₅ .2H ₂ O)	1319-33-1	>= 1 - < 2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Remark : This product contains Boron (see section 7 and 11).

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Check for and remove any contact lenses. Get medical attention immediately.
- Inhalation** : Avoid inhalation of vapor, spray or mist. If inhaled, remove to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
- Skin contact** : Wash with soap and water. Get medical attention if irritation develops.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Get medical attention if you feel unwell.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Vapor may be irritating to eyes and respiratory system.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : May cause burns to mouth, throat and stomach.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Wash contaminated clothing thoroughly

with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None identified.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
metal oxide/oxides
Avoid breathing dusts, vapors or fumes from burning materials.
In case of inhalation of decomposition products in a fire, symptoms may be delayed.
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Remark** : Non-flammable.
- Remark** : Non-explosive.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with

soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not handle until all safety precautions have been read and understood. As a precaution, keep exposure as low as possible for pregnant women, children and workers in reproductive age. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-

ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Bund storage facilities to prevent soil and water pollution in the event of spillage.

Specific recommendations to end users

: Do not generate and inhale liquid fertilizer aerosols.

In addition to overalls, gloves and eye protection, use of efficient respiratory protection (P2/P3 respirators with a tight face seal) during discharge of fertilizer bags and maintenance of equipment is recommended to minimize inhalation exposure and to ensure safe-use during this activity (see section 8).



Risk assessments show safe use during normal spreading of fertilizers containing below 5% of boron by tractor (liquid or granular) and backpack (liquid).

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Ulexite (CaNaH12(BO3)5.2H2O)	None.
Copper oxide (Cu2O)	None.
Zinc oxide (ZnO)	<p>OSHA PEL 1989 (1989-03-01) TWA 5 mg/m3 Form: Fume STEL 10 mg/m3 Form: Fume TWA 10 mg/m3 Form: Total dust TWA 5 mg/m3 Form: Respirable fraction</p> <p>OSHA PEL (1993-06-30) TWA 5 mg/m3 Form: Fume TWA 15 mg/m3 Form: Total dust TWA 5 mg/m3 Form: Respirable fraction</p> <p>NIOSH REL (1994-06-01) TWA 5 mg/m3 Form: Dust and fumes STEL 10 mg/m3 Form: Fume CEIL 15 mg/m3 Form: Dust</p> <p>ACGIH TLV (2003-01-01) TWA 2 mg/m3 Form: Respirable fraction STEL 10 mg/m3 Form: Respirable fraction</p>
Boron calcium oxide (B6Ca2O11), hydrate (1:5)	None.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : A washing facility or water for eye and skin cleaning purposes should be present. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Recommended: Tightly-fitting goggles
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. For general applications, we recommend gloves with a thickness typically greater than 0.35 mm. It should be emphasized that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use respiratory protection with more than 94% efficiency (P2, P3 or N95) and a tight face seal, when risk of exposure to dust.
- Personal protective equipment (Pictograms)** :  

Section 9. Physical and chemical properties

- Appearance**
- Physical state** : liquid [Suspension]

Color	: Orange. Pink
Odor	: Not determined.
Odor threshold	: Not determined.
pH	: 6.3
Melting/freezing point	: Not determined.
Boiling/condensation point	: Not determined.
Sublimation temperature	: Not determined.
Flash point	: Not determined.
Fire point	: Not determined.
Evaporation rate	: Not determined.
Flammability (solid, gas)	: Non-flammable.
Lower and upper explosive (flammable) limits	: Lower: Not determined. Upper: Not determined.
Vapor pressure	: Not determined.
Density	: 1,668 kg/m ³
Relative density	: Not determined.
Solubility	: Miscible in water.
Partition coefficient: n-octanol/water	: Not determined.
Auto-ignition temperature	: Not determined.
Decomposition temperature	: Not determined.
Viscosity	: Dynamic: Not determined. Kinematic: Not determined.
Explosive properties	: Non-explosive.
Oxidizing properties	: None

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid contamination by any source including metals, dust and organic materials.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure	References
Ulexite (CaNaH ₁₂ (BO ₃) ₅ .2H ₂ O)					
	LD50 Dermal	Rabbit	> 5,000 mg/kg	Not applicable.	
Copper oxide (Cu ₂ O)					
	LD50 Oral	Rat - Female	> 928 mg/kg OECD 401	Not applicable.	IUCLID 5
	LC50 Inhalation Dusts and mists	Rat	3.34 mg/l OECD 403	4 h	IUCLID 5
	LD50 Dermal	Rabbit	> 5,000 mg/kg OECD 402	Not applicable.	IUCLID
Zinc oxide (ZnO)					
	LD50 Oral	Rat	> 5,000 mg/kg	Not applicable.	IUCLID 5
	LC50 Inhalation Dusts and mists	Rat	> 5.7 mg/l	4 h	IUCLID 5
Boron calcium oxide (B ₆ Ca ₂ O ₁₁), hydrate (1:5)					
	LD50 Dermal	Rabbit	> 5,000 mg/kg	Not applicable.	

Conclusion/Summary : No known significant effects or critical hazards.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation	References
Copper oxide (Cu ₂ O)	Eyes - Moderate irritant OECD 405	Rabbit	Not applicable.	21 d	Not applicable.	IUCLID 5

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Eyes : Causes serious eye damage.

Respiratory : No known significant effects or critical hazards.

Sensitization

Product/ingredient name	Route of exposure	Species	Result	References
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Copper oxide (Cu2O)	Skin	Pig	Not sensitizing OECD 406	
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Conclusion/Summary

- Skin** : No known significant effects or critical hazards.
- Respiratory** : No known significant effects or critical hazards.

Mutagenicity

- Conclusion/Summary** : No known significant effects or critical hazards.

Carcinogenicity

- Conclusion/Summary** : No known significant effects or critical hazards.

Reproductive toxicity

Product/ing redient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure	References
Copper oxide (Cu2O)	Not applicable.	Negative	Not applicable.	Rat	Oral: > 1500 mg/kg OECD 416	Not applicable.	IUCLID 5
	Not applicable.	Not applicable.	Negative	Rabbit	Oral: 6 mg/kg bw/day OECD 414	Not applicable.	IUCLID 5

- Conclusion/Summary** : Suspected of damaging fertility. Suspected of damaging the unborn child.

Specific target organ toxicity (single exposure)

No known significant effects or critical hazards.

Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

Aspiration hazard

No known significant effects or critical hazards.

- Information on the likely routes of exposure** : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Vapor may be irritating to eyes and respiratory system.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : May cause burns to mouth, throat and stomach.

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

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure	References
Copper oxide (Cu ₂ O)	NOAEL Oral	Rat	1,000 mg/kg OECD 408	92days 7 days per week	IUCLID 5

- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Fertility effects** : Suspected of damaging fertility.
- Developmental effects** : Suspected of damaging the unborn child.
- Effects on or via lactation** : No known significant effects or critical hazards.
- Other effects** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.

Ingestion : May cause burns to mouth, throat and stomach.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	5,086.6 mg/kg
Route	ATE value
Inhalation (dusts and mists)	33.98 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure	References
Ulexite (CaNaH ₁₂ (BO ₃) ₅ .2H ₂ O)				
	Acute EC50 > 100 mg/l Fresh water	Daphnia	48 h	
Copper oxide (Cu ₂ O)				
	Acute LC50 0.08 - 0.28 mg/l Fresh water	Fish	96 h	IUCLID 5
	Acute EC50 0.028 - 0.792 mg/l Fresh water OECD 211	Water flea	21 d	IUCLID 5
	Acute EC50 0.333 mg/l Fresh water OECD 201	Algae	72 h	IUCLID 5
Zinc oxide (ZnO)				
	Acute NOEC 0.026 - 0.075 mg/l Fresh water	Fish.	720 h	IUCLID 5
	Acute LC50 0.14 mg/l Fresh water	Crustaceans	24 h	IUCLID 5
	Acute EC50 1 - 10 mg/l Fresh water	Water flea	48 h	IUCLID 5
	Acute IC50 0.136 mg/l Fresh water OECD 201	Algae	72 h	IUCLID
Boron calcium oxide (B ₆ Ca ₂ O ₁₁), hydrate (1:5)				
	Acute EC50 > 100 mg/l Fresh water	Daphnia	48 h	

Conclusion/Summary : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Persistence and degradability

Conclusion/Summary : No known significant effects or critical hazards.

Bioaccumulative potential

Conclusion/Summary : No known significant effects or critical hazards.

Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

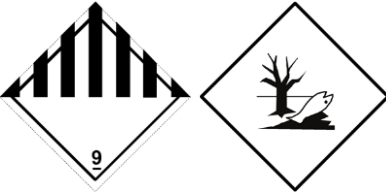
Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

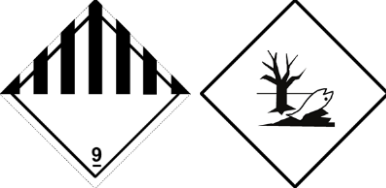
Section 13. Disposal considerations**Product**

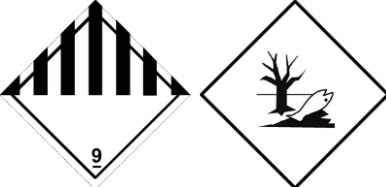
Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

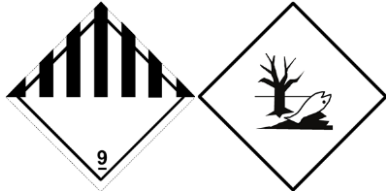
Regulation: UN Class	
14.1 UN number	3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide, dicopper oxide,)
14.3 Transport hazard class(es)	9 
14.4 Packing group	III

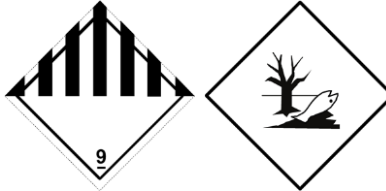
14.5 Environmental hazards	Yes.
Additional information <u>Environmental hazards</u>	: Yes.

Regulation: IMDG	
14.1 UN number	3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide, dicopper oxide,)
14.3 Transport hazard class(es)	9 
14.4 Packing group	III
14.5 Environmental hazards	Yes.
Additional information <u>Marine pollutant</u>	: Yes.
<u>Emergency schedules (EmS)</u>	: F-A, S-F

Regulation: IATA	
14.1 UN number	3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide, dicopper oxide,)
14.3 Transport hazard class(es)	9 
14.4 Packing group	III
14.5 Environmental hazards	Yes.
Additional information <u>Marine pollutant</u>	: Yes.

Regulation: DOT Classification	
14.1 UN number	3082
14.2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (zinc oxide,)
14.3 Transport hazard class(es)	9

	
14.4 Packing group	III
14.5 Environmental hazards	Yes.
Additional information	
<u>Marine pollutant</u>	: Not available.

Regulation: TDG Class	
14.1 UN number	3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide, dicopper oxide,)
14.3 Transport hazard class(es)	9 
14.4 Packing group	III
14.5 Environmental hazards	Yes.
Additional information	
Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark)	
<u>Environmental hazards</u>	: Yes.

14.6 Special precautions for user : Transport within user's premises: Ensure that persons transporting the product know what to do in the event of an accident or spillage.

IMSBC : Not applicable.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Section 15. Regulatory information

United States

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Copper oxide (Cu₂O); Zinc

Date of issue : 08/24/2018

Page:15/19

oxide (ZnO);
United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Phosphoric acid;

- Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : SERIOUS EYE DAMAGE
 Category 1 TOXIC TO REPRODUCTION
 Fertility
 Category 2 TOXIC TO REPRODUCTION
 Unborn child
 Category 2

Composition/information on ingredients

Name	%	Classification
Copper oxide (Cu2O)	>= 5 - < 7	AHAHAHAH

SARA 313

Form R - Reporting requirements

Product name	CAS number	%
Zinc oxide (ZnO)	1314-13-2	>= 12.5 - < 15
Carbonic acid, manganese(2+) salt (1:1)	598-62-9	>= 12.5 - < 15
Copper oxide (Cu2O)	1317-39-1	>= 5 - < 7

Supplier notification

Product name	CAS number	%
Copper oxide (Cu ₂ O)	1317-39-1	>= 5 - < 7
Zinc oxide (ZnO)	1314-13-2	>= 12.5 - < 15
Carbonic acid, manganese(2+) salt (1:1)	598-62-9	>= 12.5 - < 15

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

- Massachusetts** : The following components are listed:
Zinc oxide (ZnO)
- New York** : None of the components are listed.
- New Jersey** : The following components are listed:
Copper oxide (Cu₂O)
Zinc oxide (ZnO)
- Pennsylvania** : The following components are listed:
Zinc oxide (ZnO)
Copper oxide (Cu₂O)
Carbonic acid, manganese(2+) salt (1:1)

California Prop. 65

⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

Inventory list

Australia inventory (AICS): All components are listed or exempted.

Canada inventory: All components are listed or exempted.

United States inventory (TSCA 8b): All components are listed or exempted.

EC INVENTORY (EINECS/ELINCS): All components are listed or exempted.

Canada: All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Chronic toxicity:

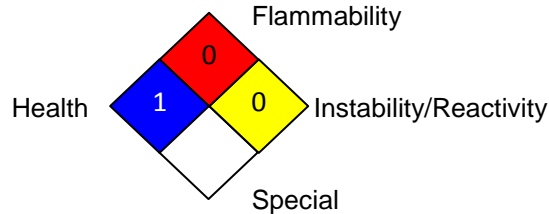
Date of issue : 08/24/2018

Page:17/19

- : No data available.

* : Carcinogen, Target organs, Reproductive effects, Sensitizer to lungs

National Fire Protection Association (U.S.A.)



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Procedure used to derive the classification

Classification	Justification
SERIOUS EYE DAMAGE - Category 1	Calculation method
TOXIC TO REPRODUCTION (Fertility) - Category 2	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 2	Calculation method
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method

History

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Prepared by	: Yara Chemical Compliance (YCC).
Key to abbreviations	: ATE = Acute Toxicity Estimate
	: BCF = Bioconcentration Factor
	: GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	: IATA = International Air Transport Association
	: IBC = Intermediate Bulk Container
	: IMDG = International Maritime Dangerous Goods
	: LogPow = logarithm of the octanol/water partition coefficient

Key data sources

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations
: EU REACH IUCLID5 CSR.
National Institute for Occupational Safety and Health, U.S. Dept. of Health, Education, and Welfare, Reports and Memoranda Registry of Toxic Effects of Chemical Substances.
Sphera Solutions Inc., 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada.

|| Indicates information that has changed from previously issued version.

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