Conforms: GHS (rev 3)(2009)

(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 11/25/2014 09/11/2014 Date of previous issue

Version 3.0



SAFETY DATA SHEET

YaraVita Coptrac

Section 1. Identification

Product name YaraVita Coptrac

Product type Liquid Product code PYP24M

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-

(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 and labelling have been performed following the guidelines and recommendation of GHS and the intended use.

Classification of the ACUTE TOXICITY (oral) - Category 4 substance or mixture

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

AQUATIC TOXICITY (ACUTE) - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 1

GHS label elements

Hazard pictograms





Signal word : Warning

Hazard statements : Harmful if swallowed.

Causes serious eye irritation.

Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention: Wear eye protection. Wash hands thoroughly after handling.

Avoid release to the environment.

Response : IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Hazards not otherwise

classified

None.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product / ingredient name	CAS number	%
Copper oxide (Cu2O)	CAS: 1317-39-1	>=35 - <50
1,2-Ethanediol	CAS: 107-21-1	>=5 - <=7

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.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Rinse with plenty of running water. Check for and remove any

contact lenses. If irritation persists, get medical attention.

Inhalation : Avoid inhalation of vapor, spray or mist. If inhaled, remove to

fresh air. Get medical attention if you feel unwell.

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. Get medical attention if adverse health effects persist or are

severe.

Most important symptoms/effects, acute and delayed

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Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Exposure to decomposition products may cause a health

hazard. Serious effects may be delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion : May be harmful if swallowed.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : Adverse symptoms may include the following:

stomach pains

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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to

be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without

suitable training. It may be dangerous to the person providing

aid to give mouth-to-mouth resuscitation.

See toxicological information (section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing

media

Specific hazards arising from

the chemical

Use an extinguishing agent suitable for the surrounding fire.

: None identified.

In a fire or if heated, a pressure increase will occur and the container may burst. This material is very 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:

carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides

ammonia

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 : Promptly isolate the scene by removing all persons from the

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fire-fighters 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 : None.

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised 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 material 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 ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible

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Advice on general occupational hygiene

material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Copper oxide (Cu2O)	
Urea	AIHA WEEL (1999-01-01) Time Weighted Average (TWA) 10 mg/m3
	NIOSH REL (2005-09-30)
1,2-Ethanediol	OSHA PEL 1989 (1989-03-01) Ceiling 125 mg/m3, 50 ppm
	NIOSH REL (1994-06-01)
	ACGIH TLV (1995-05-23) Ceiling 100 mg/m3 Form: Aerosol

Appropriate engineering controls Environmental exposure controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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.

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. chemical splash goggles. 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.

> 8 hours (breakthrough time): Protective gloves should be

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worn under normal conditions of use.

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 a properly fitted, air-purifying or air-fed respirator

complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of

the product and the safe working limits of the selected

respirator.

Section 9. Physical and chemical properties

Appearance

Physical state Liquid

Color Brownish-red. Odor Not determined. **Odor threshold** Not determined.

Hq 9.6

Melting/freezing point -8 °C (17.60 °F)

Boiling/condensation point Not determined. Sublimation temperature Not determined. Flash point Not determined. **Evaporation rate** Not determined. **Flammability** Non-flammable.

Lower and upper explosive

Lower: Not determined. (flammable) limits **Upper:** Not determined. Vapor pressure Not determined.

Relative density 1.523

Solubility Not determined. Partition coefficient: n-Not determined.

octanol/water

Auto-ignition temperature Not determined. **Decomposition temperature** Not determined.

Dynamic: 1,500 - 2,500 mPa.s **Viscosity**

Kinematic: Not determined.

Explosive properties None 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.

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Conditions to avoid : Avoid contamination by any source including metals, dust and

organic materials.

Incompatible materials : Urea reacts with calcium hypochlorite or sodium hypochlorite

to form the explosive nitrogen trichloride.

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
Copper oxide (C	Cu2O)				
	LD50 Oral	Rat - Female	> 928 mg/kg OECD 401	-	IUCLID 5
	LC50 Inhalation	Rat	3.34 mg/l OECD 403	4 h	IUCLID 5
	LD50 Dermal	Rabbit	> 2,000 mg/kg OECD 402	-	IUCLID 5
1,2-Ethanediol					
	LD50 Oral	Rat	4,700 mg/kg	-	VCVGK* - ,139,1984

Conclusion/Summary : May be harmful if swallowed.

Irritation/Corrosion

Product / ingredient name	Result	Species	Score	Exposur e	Observatio n	References
Copper oxide (Cu2O)	Eyes - Moderate irritant OECD 405	Rabbit		21 d	-	IUCLID 5

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Eyes : Causes serious eye irritation.

Respiratory : No known significant effects or critical hazards.

Sensitization

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

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Respiratory : No known significant effects or critical hazards.

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

Product / ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure	References
Copper oxide (Cu2O)	-	Negative	-	Rat	Oral: > 1500 mg/kg 416 Two- Gener ation Repro ductio n Toxicit y Study	-	IUCLID 5
Copper oxide (Cu2O)	-	-	Negative	Rabbit	Oral: 6 mg/kg bw/day OECD 414	-	IUCLID 5

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

Teratogenicity

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

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 irritation.

Inhalation : Exposure to decomposition products may cause a health

hazard. Serious effects may be delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion : May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

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pain or irritation

watering redness

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : Adverse symptoms may include the following:

stomach pains

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 (Cu2O)	NOAEL Oral	Rat	1000 mg/kg OECD 408	92days 7 days per week	IUCLID 5

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

General:No known significant effects or critical hazards.Carcinogenicity:No known significant effects or critical hazards.Mutagenicity:No known significant effects or critical hazards.Teratogenicity:No known significant effects or critical hazards.Developmental effects:No known significant effects or critical hazards.Fertility effects:No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : Adverse symptoms may include the following:

stomach pains

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

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Toxicity

Product / ingredient	Result	Species	Exposure	References
name Copper oxide (Cu2O)				
Copper exide (Cd25)	Acute LC50 0.08 - 0.28 mg/l Fresh water	Fish - Labeo boga	96 h	IUCLID 5
	Acute EC50 0.028 - 0.792 mg/l Fresh water OECD 211	Aquatic invertebrates Daphnia magna	21 d	IUCLID 5
	Acute EC50 0.333 mg/l Fresh water OECD 201	Aquatic plants - Heterosigma akashiwo	72 h	IUCLID 5
1,2-Ethanediol				
	Acute LC50 16,000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 h	Resour.Publ.No.16 0, U.S.Dep.Interior, Fish Wildl.Serv., Washington, DC :505 p. (USGS Data File)
	Acute LC50 27,540 mg/l Fresh water	Fish - Lepomis macrochirus	96 h	In: D.H.Hemphill and C.R.Cothern (Eds.), Trace Substances in Environmental Health, Suppl.Volume 12, Proc.Conf.Held inthe Hotel Wastin, May 29-June 1, 1989, Cincinnati, OH:371-378

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

Persistence/degradability

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

Bioaccumulative potential

Product / ingredient name	LogPow	BCF	Potential
1,2-Ethanediol	-1.36-1.36	-	low

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

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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.

United States - RCRA Acute hazardous waste "P" List:

Not listed

United States - RCRA Toxic hazardous waste "U" List:

Not listed

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. (dicopper oxide,)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes.
14.6 Additional information Environmental hazards	: Yes.

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

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14.4 Packing group	
14.5 Environmental hazards	Yes.
14.6 Additional information	
Marine pollutant	: Yes.
Emergency schedules (EmS)	: F-A, S-F

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

Regulation: DOT Classification		
14.1 UN number	3082	
14.2 UN proper shipping name	()	
14.3 Transport hazard class(es)		
14.4 Packing group		
14.5 Environmental hazards	Yes.	
14.6 Additional information		
Environmental hazards	: Yes.	
<u>Limited quantity</u>	: 0.00	

Regulation: TDG Class		
14.1 UN number	3082	
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,	
	N.O.S. ()	

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14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes.
14.6 Additional information Environmental hazards	: Yes.

Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.'

Remark

THIS PRODUCT IN NON-BULK PACKAGING IS A MARINE POLLUTANT WHEN TRANSPORTED BY VESSEL. HOWEVER, IT IS NOT DOT REGULATED WHEN TRANSPORTED BY HIGHWAY ONLY PER 49 CFR, 171.4(c)

IMSBC Not applicable.

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

Not available.

Section 15. Regulatory information

United States

U.S. Federal regulations

United States - TSCA 12(b) - Chemical export notification: None of the components are listed.

United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(e) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not

United States - TSCA 4(f) - Priority risk review: Not

listed

United States - TSCA 5(a)2 - Final significant new use rules: Not listed

United States - TSCA 5(a)2 - Proposed significant new

use rules: Not listed

United States - TSCA 5(e) - Substances consent order:

Not listed

United States - TSCA 6 - Final risk management: Not

United States - TSCA 6 - Proposed risk management:

Not listed

United States - TSCA 8(a) - Comprehensive

assessment report (CAIR): Not listed

United States - TSCA 8(a) - Chemical risk rules: Not

listed

Date of issue: 11/25/2014 Page:13/16 United States - TSCA 8(a) - Dioxin/Furane precusor:

Not listed

United States - TSCA 8(a) - Chemical Data Reporting

(CDR): Not determined

United States - TSCA 8(a) - Preliminary assessment

report (PAIR): Not listed

United States - TSCA 8(c) - Significant adverse

reaction (SAR): Not listed

United States - TSCA 8(d) - Health and safety studies:

Not listed

United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Copper oxide (Cu2O) United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Listed Sodium

hydroxide (Na(OH))

United States - EPA Clean air act (CAA) section 112 -

Accidental release prevention - Flammable

substances: Not listed

United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances:

Not listed

United States - Department of commerce - Precursor

chemical: Not listed

Clean Air Act Section 112(b)

Hazardous Air Pollutants

(HAPs)

Clean Air Act Section 602

Class I Substances

Clean Air Act Section 602

Class II Substances

DEA List I Chemicals

(Precursor Chemicals)
DEA List II Chemicals

(Essential Chemicals)

: Listed

Not listed

Not listed

Not listed

: Not listed

SARA 302/304

Not applicable.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

SARA 313

		Product name	CAS number	Concentration
Form R - Reporting requirements	:	Copper oxide (Cu2O)	1317-39-1	35 - 50
		1,2-Ethanediol	107-21-1	5 - 7
Supplier notification	:	Copper oxide (Cu2O)	1317-39-1	35 - 50
		1,2-Ethanediol	107-21-1	5 - 7

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

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State regulations

Massachusetts : The following components are listed:

1.2-Ethanediol

New York : The following components are listed:

1,2-Ethanediol

New Jersey : The following components are listed:

Copper oxide (Cu2O)

1,2-Ethanediol

Pennsylvania : The following components are listed:

Copper oxide (Cu2O)

1,2-Ethanediol

California Prop. 65

This product contains a chemical (or chemicals) known to the State of California to cause cancer and birth defects or other reproductive harm.

International lists

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

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

Canada inventory (DSL and NDSL): 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.

Section 16. Other information

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

Health	-	2
Flammability		0
Physical hazards		0

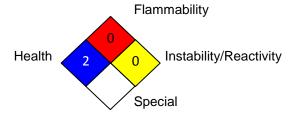
Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

Chronic toxicity:

- -: No data available.
- *: Carcinogen, Target organs, Reproductive effects, Sensitizer to lungs

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



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its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations

ADN/ADNR = European Provisions concerning the International Carriage of

Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

bw = Body weight

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

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine

pollution)

NOHSC - National Occupational Health and Safety Commission

RID = The Regulations concerning the International Carriage of Dangerous

Goods by Rail

SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons

UN = United Nations

References : 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.

IHS, 4777 Levy Street, St Laurent, Quebec HAR 2P9,

Canada.

History

Date of printing: 03/16/2015Date of issue/Date of revision: 11/25/2014Date of previous issue: 09/11/2014

Version : 3.0

Prepared by : Yara Product Classifications & Regulations.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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