(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: 08/26/2019Date of previous issue: 08/22/2018Version: 2.0



## SAFETY DATA SHEET

YaraLiva Calcinit K

## **Section 1. Identification**

Product identifier : YaraLiva Calcinit K
Product type : solid (Granular solid.)

Product code : PA318U

<u>Uses</u>

**Area of application** : Professional applications

Material uses : Fertilizers.

<u>Supplier</u>

Supplier's details : Yara North America, Inc.

<u>Address</u>

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-hesg@yara.com

responsible for this SDS

Emergency telephone number : US: Chemtrec 24-hours Emergency Response: 1-800-424-

(with hours of operation) 93

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 : ACUTE TOXICITY (oral) - Category 4 substance or mixture. : SERIOUS EYE DAMAGE - Category 1

#### **GHS label elements**

Hazard pictograms



Signal word : Danger

Hazard statements : H302 Harmful if swallowed.

H318 Causes serious eye damage.

**Precautionary statements** 

**Prevention**: P280 Wear protective gloves and eye protection.

P270 Do not eat, drink or smoke when using this

product.

P264-a Wash hands thoroughly after handling.

Response : 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.

P301 IF SWALLOWED:

P312 Call a POISON CENTER or

doctor/physician if you feel unwell.

P330 Rinse mouth.

Hazards not otherwise

classified

Product forms slippery surface when combined with water.

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	CAS number	%
Calcium nitrate	10124-37-5	>= 70- <80
Nitric acid potassium salt	7757-79-1	>= 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.

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### Section 4. First aid measures

#### Description of necessary first aid measures

Eve 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 If inhaled, remove to fresh air. In case of inhalation of

decomposition products in a fire, symptoms may be delayed. Get medical attention immediately. The exposed person may need to be kept under medical surveillance for 48 hours. 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. Do not induce vomiting unless directed to do so by medical personnel. 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 May give off gas, vapor or dust that is very irritating or

corrosive to the respiratory system. 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

Harmful if swallowed. 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 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.

Date of issue: 08/26/2019 Page:3/17 Specific treatments
Protection of first-aiders

No specific treatment.

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 Unsuitable extinguishing media

Specific hazards arising from the chemical

Hazardous thermal decomposition products

Use flooding quantities of water for extinction.

Do NOT use chemical extinguisher or foam or attempt to smother the fire with steam or sand.

: No specific fire or explosion hazard.

: Decomposition products may include the following materials:

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

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

ers

: 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. 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".

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#### **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).

#### Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### Section 7. Handling and storage

#### Precautions for safe handling

Not for human or animal consumption.

**Protective measures** 

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. 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

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environmental contamination. Keep away from: organic materials, oil and grease.

## Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

Ingredient name	Exposure limits
Calcium nitrate	None.
Nitric acid potassium salt	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** 

**Body 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 worn under normal conditions of use., Viton®, neoprene

Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

: 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** 

Other skin protection

: In case of inadequate ventilation wear respiratory protection.

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Personal protective equipment

(Pictograms)



# Section 9. Physical and chemical properties

**Appearance** 

Physical state : solid [Granular solid.]

Color : White.,
Odor : Odorless.

Odor threshold : Not determined. pH : 6.3 [Conc.: 110 g/l]

**Melting/freezing point** : 90 - 100 °C (194 - 212 °F)

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
Vapor pressure
Bulk density

Lower: Not determined.Upper: Not determined.

Not determined. 1,100 kg/m3

**Relative density** : 2.1 @ 20 °C (68 °F)

**Solubility** : Easily soluble in the following materials:

cold water

Partition coefficient: n-

octanol/water

: Not determined.

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

**Decomposition temperature** 

**Viscosity** 

: Not determined.

**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 : Under normal conditions of storage and use, hazardous

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reactions reactions will not occur.

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

organic materials.

**Incompatible materials** : alkalis

combustible materials reducing materials organic materials

Acids

**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/ingredie	Method	Species	Result	Exposure	References		
nt name							
Nitric acid potassiu	Nitric acid potassium salt						
	LD50 Oral	Rat	2,000 - 5,000	Not	CSR		
			mg/kg	applicable.			
	LD50 Dermal	Rat	> 5,000 mg/kg	Not	CSR		
				applicable.			
Calcium nitrate							
	OECD 423	Rat -	500 mg/kg	Not	CSR		
	LD50 Oral	Female		applicable.			
	OECD 402	Rat	> 2,000 mg/kg	Not	CSR		
	LD50 Dermal			applicable.			
	OECD 402	Rat	2,000 - 5,000	Not	IUCLID		
	LD50 Dermal		mg/kg	applicable.			

Conclusion/Summary : Harmful if swallowed.

#### Irritation/Corrosion

Product/ingredient name	Method	Species	Result	Exposure	References
Nitric acid potassium	salt				
	OECD 404 Skin	Rabbit	Non- irritating.		IUCLID 5
Calcium nitrate					
	OECD 405 Eyes	Rabbit	Severe irritant	24 - 72 h	CSR

#### **Conclusion/Summary**

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

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**Eyes** : Causes serious eye damage.

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

**Sensitization** 

Conclusion/Summary

Skin : Not sensitizing

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

**Mutagenicity** 

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

#### Carcinogenicity

#### **Classification**

Product/ingredient	OSHA	IARC	NTP
name			
Nitric acid potassium	Not	2A	Not applicable.
salt	applicable.		
Calcium nitrate	Not	2A	Not applicable.
	applicable.		

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

**Reproductive toxicity** 

**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 damage.

Inhalation : May give off gas, vapor or dust that is very irritating or

corrosive to the respiratory system. 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.

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Ingestion : Harmful if swallowed. 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** : 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	Method	Species	Result	Exposure	References
Calcium nitrate					
	OECD 407 Sub-acute NOAEL Oral	Rat	> 1,000 mg/kg	28 days	CSR

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

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

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**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

Addic toxidity commutes	
Route	ATE value
Oral	645.2 mg/kg

# Section 12. Ecological information

#### **Toxicity**

Product/ingred	Method	Species	Result	Exposure	References		
ient name							
Nitric acid potass	Nitric acid potassium salt						
	OECD 203	Fish	> 100 mg/l	96 h	CSR		
	Acute LC50						
	Fresh water						
	Acute EC50	Daphnia	490 mg/l	48 h	CSR		
	Fresh water						
	Acute EC50	Algae	> 1,700 mg/l	240 h	CSR		
	Fresh water						
Calcium nitrate							
	OECD 203	Fish	1,378 mg/l	96 h	CSR		
	Acute LC50						
	Fresh water						
	Acute LC50	Daphnia	490 mg/l	48 h	CSR		
	Fresh water						
	Acute EC50	Algae	> 1,700 mg/l	10 d	CSR		
	Salt water						
	OECD 209	Activated	180 mg/l	180 min	CSR		
	Chronic	sludge					
	NOEC						
	Activated						
	sludge						

**Conclusion/Summary** : The product does not show any bioaccumulation

phenomena. The product is not expected to harm the environment when used properly according to directions.

Persistence and degradability

**Conclusion/Summary** : Readily biodegradable in plants and soils.

**Bioaccumulative potential** 

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

Mobility in soil

Soil/water partition coefficient (KOC)

: < 1

Mobility

This product may move with surface or groundwater flows

because its water solubility is: high

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	Not regulated.	
14.2 UN proper shipping name	Not applicable.	
14.3 Transport hazard class(es)	Not applicable.	
14.4 Packing group	Not applicable.	
14.5 Environmental hazards	No.	
Additional information Environmental hazards : No.		

Regulation: IMDG

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14.1 UN number	Not regulated.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	No.
Additional information	
Marine pollutant	: No.

Regulation: IATA	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	No.
Additional information <u>Marine pollutant</u>	: No.

Regulation: DOT Classification		
14.1 UN number	Not regulated.	
14.2 UN proper shipping name	Not applicable.	
14.3 Transport hazard class(es)	Not applicable.	
14.4 Packing group	Not applicable.	
14.5 Environmental hazards	No.	
Additional information		
Marine pollutant	: Not available.	

Regulation: TDG Class	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	No.
Additional information	
Not applicable.	
Environmental hazards	: No.

# 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.

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**IMSBC** 

Bulk cargo shipping name : YaraLiva Calcinit K Class : Not applicable.

Group : C

Marpol V : Non-HME

Transport in bulk according to

Annex II of MARPOL and the

**IBC Code** 

### Section 15. Regulatory information

**United States** 

**HCS Classification** : Toxic material

Irritating material Carcinogen

Not applicable.

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not

Not listed

determined

Clean Air Act Section 112(b)

Hazardous Air Pollutants

(HAPs)

Clean Air Act Section 602 : Not listed

Class I Substances

Clean Air Act Section 602 : Not listed

**Class II Substances** 

**DEA List I Chemicals** : Not listed

(Precursor Chemicals)

**DEA List II Chemicals** : Not listed

(Essential Chemicals)

#### **SARA 302/304**

#### **Composition/information on ingredients**

No products were found.

SARA 304 RQ : Not applicable.

**SARA 311/312** 

Classification : ACUTE TOXICITY - oral - Category 4

SERIOUS EYE DAMAGE - Category 1

#### Composition/information on ingredients

Name	%	Classification

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Nitric acid potassium salt	>= 5 - < 7	Fire hazard - Delayed (chronic) health hazard Fire hazard
Calcium nitrate	>= 70 - < 80	Fire hazard - Immediate (acute) health hazard - Delayed (chronic) health hazard ACUTE TOXICITY - oral - Category 4 OXIDIZING SOLIDS - Category 3 SERIOUS EYE DAMAGE - Category 1

#### **SARA 313**

#### Form R - Reporting requirements

Product name	CAS number	%
Nitric acid potassium salt	7757-79-1	>= 5 - < 7
Calcium nitrate	10124-37-5	>= 70 - < 80

#### **Supplier notification**

Product name	CAS number	%
Nitric acid potassium salt	7757-79-1	>= 5 - < 7
Calcium nitrate	10124-37-5	>= 70 - < 80

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: None of the components are listed.New York: None of the components are listed.New Jersey: The following components are listed:

Calcium nitrate

Nitric acid potassium salt
Nitric acid, strontium salt (2:1)

**Pennsylvania** : The following components are listed:

Nitric acid sodium salt (1:1) Nitric acid, strontium salt (2:1) Nitric acid potassium salt

#### California Prop. 65

**★ WARNING:** Cancer and Reproductive Harm - <u>www.P65Warnings.ca.gov.</u>

#### **Inventory list**

Philippines inventory (PICCS): All components are listed or exempted.

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

**Korea inventory:** All components are listed or exempted. **Japan inventory:** All components are listed or exempted.

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

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

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Canada inventory: All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted. Taiwan Chemical Substances Inventory (TCSI): 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

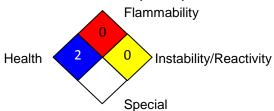
Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose 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:**

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

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



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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.

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#### Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Calculation method
SERIOUS EYE DAMAGE - Category 1	Calculation method

#### **History**

Date of printing : 11/04/2019
Date of issue/Date of revision : 08/26/2019
Date of previous issue : 08/22/2018

**Revision comments**: The following sections contain new and updated information:

11, 12.

Version : 2.0

**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 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of

1978. ("Marpol" = marine pollution)

UN = United Nations

**Key data sources** : 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.

#### 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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