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 : 08/22/2018
Date of previous issue : 11/25/2014
Version : 1.1



# SAFETY DATA SHEET

#### YaraLiva Calcinit Greenhouse/Solution Grade

## **Section 1. Identification**

Product identifier : YaraLiva Calcinit Greenhouse/Solution Grade

Other means of identification : UltrAN 110 CN
Product type : solid (prills)
Product code : PA34IU

<u>Uses</u>

**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: 33602City: TAMPACountry: 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** 

(with hours of operation)

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

9300

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/ EYE IRRITATION - 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 : Substance

CAS number/other identifiers

Other means of identification : Nitric acid, ammonium calcium salt

**CAS number** : 15245-12-2

| Ingredient name                    | CAS number | %   |
|------------------------------------|------------|-----|
| Nitric acid, ammonium calcium salt | 15245-12-2 | 100 |

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

Date of issue : 08/22/2018 Page:2/16

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** : Immediately flush eyes with plenty of 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. 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. 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

Date of issue : 08/22/2018 Page:3/16

**Specific treatments Protection of first-aiders**  be kept under medical surveillance for 48 hours.

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. 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.

Avoid breathing dusts, vapors or fumes from burning materials.

In case of inhalation of decomposition products in a fire,

symptoms may be delayed.

Remark Non-flammable substance.

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. Fire-fighters should wear appropriate protective equipment

Special protective equipment for fire-fighters

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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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".

Date of issue: 08/22/2018 Page:4/16

#### **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

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

# Section 8. Exposure controls/personal protection

Date of issue: 08/22/2018 Page:5/16

#### **Control parameters**

Occupational exposure limits

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.

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.

> 8 hours (breakthrough time): Protective gloves should be 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, particulate filter 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.

# Personal protective equipment (Pictograms)

:



# Section 9. Physical and chemical properties

#### **Appearance**

Physical state : solid [prills]

Date of issue: 08/22/2018 Page:6/16

Color : White.
Odor : Odorless.

Odor threshold : Not determined. pH : 5 - 7 [Conc.: 110 g/l]

Melting/freezing point : 400 °C (752 °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 Relative density **Lower:** Not determined. **Upper:** Not determined.

Not determined.
Not determined.

**Solubility** : > 100 g/l

Easily soluble in the following materials:

cold water

Solubility in water : > 100 g/l

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** : 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.

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

organic materials.

**Incompatible materials** : alkalis

combustible materials reducing materials

Date of issue: 08/22/2018 Page:7/16

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/ingre dient name | Result            | Species | Dose                               | Exposure        | References |
|--------------------------|-------------------|---------|------------------------------------|-----------------|------------|
| Nitric acid, amm         | nonium calcium sa | lt      |                                    |                 |            |
|                          | LD50 Oral         | Rat     | 500 mg/kg<br>OECD 423              | Not applicable. | IUCLID     |
|                          | LD50 Dermal       | Rat     | 2,000 - 5,000<br>mg/kg OECD<br>402 | Not applicable. |            |

Conclusion/Summary : Harmful if swallowed.

### **Irritation/Corrosion**

| Product/ingred ient name | Result                      | Species | Score      | Exposure  | Observation | References |
|--------------------------|-----------------------------|---------|------------|-----------|-------------|------------|
| Nitric acid, ammonium    | Eyes - Severe irritant OECD | Rabbit  | Not applic | 24 - 72 h | 21 d        | IUCLID 5   |
| calcium salt             | 405                         |         | able.      |           |             |            |

#### **Conclusion/Summary**

**Skin** : Non-irritating to the skin.

**Eyes** : Causes serious eye damage.

**Respiratory** : Non-irritating to the respiratory system.

**Sensitization** 

Conclusion/Summary

**Skin** : Not sensitizing **Respiratory** : Not determined.

**Mutagenicity** 

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

**Carcinogenicity** 

Date of issue : 08/22/2018 Page:8/16

**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.

**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 : Adverse health effects are considered unlikely, when the

product is used according to directions.

Potential delayed effects : None identified.

Date of issue : 08/22/2018 Page:9/16

#### YaraLiva Calcinit Greenhouse/Solution Grade

#### Long term exposure

Potential immediate effects : Adverse health effects are considered unlikely, when the

product is used according to directions.

Potential delayed effects : None identified.

#### Potential chronic health effects

| Product/ingredient                 | Result     | Species | Dose                            | Exposure | References |
|------------------------------------|------------|---------|---------------------------------|----------|------------|
| name                               |            |         |                                 |          |            |
| Nitric acid, ammonium calcium salt | NOAEL Oral | Rat     | > 1,000<br>mg/kg<br>OECD<br>407 | 28days   | IUCLID 5   |

**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

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**

#### **Toxicity**

| Product/ingredient name            | Result | Species | Exposure | References |
|------------------------------------|--------|---------|----------|------------|
| Nitric acid, ammonium calcium salt |        |         |          |            |

Date of issue : 08/22/2018 Page:10/16

| Acute LC50 447 mg/l Fresh water                            | Fish             | 48 h | IUCLID 5 |
|--|------------------|------|----------|
| Acute EC50 > 100<br>mg/l Fresh water<br>OECD 202           | Daphnia          | 48 h | IUCLID 5 |
| Acute LC50 > 100<br>mg/l Fresh water<br>OECD 201           | Algae            | 72 h | IUCLID 5 |
| Acute EC50 ><br>1,000 mg/l<br>Activated sludge<br>OECD 209 | Activated sludge | 3 h  | IUCLID 5 |

#### **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** 

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

Date of issue : 08/22/2018 Page:11/16 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            | 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                |                 |  |
|---------------------------------|-----------------|--|
| 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                               | 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. |  |

Date of issue : 08/22/2018 Page:12/16

| 14.4 Packing group                             | Not applicable.  |
|--|------------------|
| 14.5 Environmental hazards                     | No.              |
| Additional information <u>Marine pollutant</u> | : 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.

**IMSBC** 

**Bulk cargo shipping name** 

CALCIUM NITRATE FERTILIZER

Class

Not applicable.

Group

С

Marpol V

Non-HME

Transport in bulk according to

Annex II of MARPOL and the

**IBC Code** 

Not applicable.

# **Section 15. Regulatory information**

**United States** 

U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not

determined

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** 

Not listed

Not listed

Not listed

Not listed

(Precursor Chemicals)

Date of issue: 08/22/2018 Page:13/16 **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 : Immediate (acute) health hazard

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

| Name                          | %   | Classification              |
|-------------------------------|-----|-----------------------------|
| Nitric acid, ammonium calcium | 100 | AHEye Dam., 1Acute Tox.,, 4 |
| salt                          |     |                             |

#### **State regulations**

Massachusetts:None of the components are listed.New York:None of the components are listed.New Jersey:None of the components are listed.Pennsylvania:None of the components are listed.

### California Prop. 65

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

#### **Inventory list**

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

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

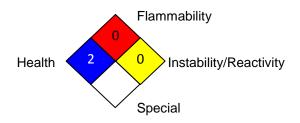
Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted.

**United States inventory (TSCA 8b):** All components are listed or exempted. **EC INVENTORY (EINECS/ELINCS):** All components are listed or exempted.

### Section 16. Other information

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

Date of issue : 08/22/2018 Page:14/16



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in 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.

#### Procedure used to derive the classification

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

#### **History**

Date of printing: 08/27/2018Date of issue/Date of revision: 08/22/2018Date of previous issue: 11/25/2014

Version : 1.1

**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.

Date of issue: 08/22/2018 Page:15/16

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.

Date of issue : 08/22/2018 Page:16/16