

# SAFETY DATA SHEET

#### **DOLOMITIC QUICKLIME**

## **Section 1. Identification**

**GHS** product identifier

: DOLOMITIC QUICKLIME

**Product code** 

: Not available.

Other means of identification

: Mag lime, Dolime, Fluxing Lime, Kemidol Oxide, Kemidol Oxide Fines, Calcium

Magnesium Oxide.

**Product type** 

: Solid.

#### Relevant identified uses of the substance or mixture and uses advised against

#### **Identified uses**

Neutralization, flocculation, flux and slag conditioner, (steelmaking), absorption.

Supplier/Manufacturer

: GRAYMONT

#200-10991 Shellbridge Way Richmond, BC V6X 3C6

Canada

Phone: 1 604 207-4292 Toll free: 1 866 207-4292

Fax: 1 604 207-9014

Web Site: http://www.graymont.com/

Emergency telephone number (with hours of

operation)

: CHEMTREC, US (800-424-9300) INTERNATIONAL: (703-527-3887)

## 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

: SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

CARCINOGENICITY - Category 1A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

**GHS label elements** 

Hazard pictograms







Signal word : Danger



### Section 2. Hazards identification

**Hazard statements** 

: H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H335 - May cause respiratory irritation.

H350 - May cause cancer. (inhalation)

H372 - Causes damage to organs through prolonged or repeated exposure. (respiratory

tract)

**Precautionary statements** 

**Prevention** 

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves, protective clothing and eye or face protection.

P271 - Use only outdoors or in a well-ventilated area.

P260 - Do not breathe dust.

P270 - Do not eat, drink or smoke when using this product.

P264 - Wash thoroughly after handling.

Response

: P308 + P313 - IF exposed or concerned: Get medical advice or attention.

P304 + P340, P312 - IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P332 + P313 - If skin irritation occurs: Get medical advice or attention.

P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor.

Storage

: P401 - Store to minimize dust generation.

**Disposal** 

: P501 - Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Supplemental label

elements

: Not applicable.

**Hazards not otherwise** classified

: Reacts violently with water, generating heat which can ignite combustible materials.

## Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

: Mixture

: Mag lime, Dolime, Fluxing Lime, Kemidol Oxide, Kemidol Oxide Fines, Calcium Magnesium Oxide.

Ingredient name	%	CAS number
Calcium oxide	≥50 - ≤75	1305-78-8
Magnesium oxide	≥50 - ≤75	1309-48-4
Crystalline silica, respirable powder	0.0001 - 1	14808-60-7

Crystalline silica has been found in some products at or above detection level 0.1%. Concentration is dependent upon limestone source.

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** 

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. When used under normal conditions quicklime doesn't generate fumes. However dust (Particulates) may be generated. Use dust-mask if dust is present. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** 

: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : May cause respiratory irritation.

Skin contact : Causes skin irritation.

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

#### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

burning sensation

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

**Ingestion**: Adverse symptoms may include the following:

stomach pains





## Section 4. First aid measures

#### 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** 

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. 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

: Use dry chemical fire extinguisher.

Unsuitable extinguishing media

: Do not use water or halogenated compounds, except that large amounts of water may be used to deluge small quantities of quicklime.

Specific hazards arising from the chemical

Hazardous thermal decomposition products

: Not applicable.

: None.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters

: First move people out of line-of-sight of the scene and away from windows.

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 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".

**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. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.





### Section 6. Accidental release measures

#### 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). Avoid exposure obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

#### 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. See also Section 8 for additional information on hygiene measures.

# including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in a segregated and approved area. 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 to minimize dust generation. 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.

## Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

Ingredient name	<b>Exposure limits</b>
Calcium oxide	ACGIH TLV (United States, 3/2017).  TWA: 2 mg/m³ 8 hours.  NIOSH REL (United States, 10/2016).  TWA: 2 mg/m³ 10 hours.  OSHA PEL (United States, 6/2016).  TWA: 5 mg/m³ 8 hours.
Crystalline silica, respirable powder	OSHA PEL Z3 (United States, 6/2016).  TWA: 250 mppcf 8 hours. Form: Respirable TWA: 10 mg/m³ 8 hours. Form: Respirable TWA: 5 mg/m³ Form: Respirable fraction TWA: 15 mg/m³ Form: Total dust NIOSH REL (United States, 10/2016).  TWA: 0.05 mg/m³ 10 hours. Form: Respirable dust TWA: 5 mg/m³ Form: Respirable fraction
	TWA: 10 mg/m3 Form: Total dust OSHA PEL (United States, 5/2018).  TWA: 50 µg/m³ 8 hours. Form: Respirable dust  ACGIH TLV (United States, 3/2019).



## Section 8. Exposure controls/personal protection

TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction

MSHA PEL

TWA 8/40 hours:
30 mg/m3/(%SiO2)+2 mg/m3 Form: Total dust

10 mg/m3/(%SiO2)+2 mg/m3 Form:
Respirable dust

# Appropriate engineering controls

: Use only with adequate ventilation. 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. Engineering controls may be required to control the primary or secondary risks associated with this product.

# **Environmental exposure** controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

#### **Individual protection measures**

#### Hygiene measures

: 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.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### 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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

# 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### 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. Wear an appropriate NIOSH approved respirator if concentration levels exceed the safe exposure limits.





# Section 9. Physical and chemical properties

**Appearance** 

Physical state : Solid. [Crystalline.]

Color : White.

Odor : Sweet, soil like odor.

Odor threshold : Not available.

**pH** : 11.7 [Sat. soln.] at 25°C

Melting point : 2400°C (4352°F)

**Boiling point** : 2850 to 3600°C (5162 to 6512°F)

Flash point : Not applicable.

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Vapor pressure : Not available.
Vapor density : Not available.
Relative density : 3.5 to 3.6

Solubility in water : 0.1 g/100 g at 20°C

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

Flow time (ISO 2431) : Not available.

# Section 10. Stability and reactivity

Reactivity : Reacts violently with water to form calcium magnesium hydroxide oxide, generating

heat.

**Chemical stability** : The product is stable.

Possibility of hazardous

reactions

: Exothermic reaction to water.

**Conditions to avoid** : Do not allow quicklime to come into contact with incompatible materials. e.g. Water,

acids, reactive fluoridated compounds, reactive brominated compounds, reactive powdered metals, organic acid anhydrides, nitro-organic compounds, reactive

phosphorous compounds, interhalogenated compounds.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, acids and

moisture.

**Hazardous decomposition** 

products

: None.





# Section 11. Toxicological information

#### Information on toxicological effects

#### **Acute toxicity**

There is no data available.

#### **Irritation/Corrosion**

There is no data available.

#### **Sensitization**

There is no data available.

#### **Mutagenicity**

There is no data available.

#### **Carcinogenicity**

#### Classification

Product/ingredient name	OSHA	IARC	NTP
Crystalline silica, respirable powder	-	1	Known to be a human carcinogen.

#### Reproductive toxicity

There is no data available.

#### **Teratogenicity**

There is no data available.

#### Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Calcium oxide	Category 3		Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Crystalline silica, respirable powder	Category 1	inhalation	respiratory tract

#### **Aspiration hazard**

There is no data available.

Information on the likely routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential acute health effects

**Eye contact** : Causes serious eye damage. Inhalation : May cause respiratory irritation.

**Skin contact** : Causes skin irritation.

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

#### Symptoms related to the physical, chemical and toxicological characteristics





## **Section 11. Toxicological information**

**Eye contact**: Adverse symptoms may include the following:

watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

burning sensation

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

**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** 

: No known significant effects or critical hazards.

effects

**Potential delayed effects**: No known significant effects or critical hazards.

Long term exposure

Potential immediate

effects

: No known significant effects or critical hazards.

Potential delayed effects

: No known significant effects or critical hazards.

Potential chronic health effects

General : Causes damage to organs through prolonged or repeated exposure.

Carcinogenicity: May cause cancer if inhaled. Risk of cancer depends on duration and level of exposure.

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.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

There is no data available.

## **Section 12. Ecological information**

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Calcium oxide		Fish - Oreochromis niloticus - Juvenile (Fledgling, Hatchling, Weanling)	46 days

#### Persistence and degradability

There is no data available.





## Section 12. Ecological information

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Calcium oxide	-	2.34	low

**Mobility in soil** 

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

## **Section 13. Disposal considerations**

**Disposal methods** 

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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 empty 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**

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	UN1910
UN proper shipping name	-	-	CALCIUM OXIDE
Transport hazard class(es)	-	-	8
Packing group	-	-	III
Environmental hazards	No.	No.	No.

**AERG** : 157

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.

Transport in bulk according : Not available. to IMO instruments





# **Section 15. Regulatory information**

U.S. Federal regulations

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

RCRA classification: Not listed or classified. CWA-311: Dolomitic Quicklime is not listed.

CERCLA: Not listed. FDA: Not applicable

**Clean Air Act Section 112** 

(b) Hazardous Air **Pollutants (HAPs)**  : Not 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** 

: Not listed

(Essential Chemicals)

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

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312** 

Classification : SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

CARCINOGENICITY - Category 1A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

#### Composition/information on ingredients

Name	%	Classification
Calcium oxide	≥50 - ≤75	SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Crystalline silica, respirable powder	0.0001 - 1	CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

#### State regulations

**Massachusetts** : The following components are listed: Calcium oxide; Magnesium oxide; Crystalline silica, respirable powder

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: Calcium oxide; Magnesium oxide; Crystalline silica,

respirable powder

**Pennsylvania** The following components are listed: Calcium oxide; Magnesium oxide; Crystalline silica,

respirable powder

#### California Prop. 65



## Section 15. Regulatory information

⚠ WARNING: This product can expose you to Crystalline silica, respirable powder, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Crystalline silica, respirable powder	-	-

#### **International regulations**

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### **Montreal Protocol**

Not listed.

#### **Stockholm Convention on Persistent Organic Pollutants**

Not listed.

#### **Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

#### **Inventory list**

**Australia** : All components are listed or exempted. Canada : All components are listed or exempted. China : All components are listed or exempted. **Europe** : All components are listed or exempted.

**Japan** : Japan inventory (ENCS): All components are listed or exempted.

Japan inventory (ISHL): Not determined.

**New Zealand** : All components are listed or exempted. **Philippines** : All components are listed or exempted. Republic of Korea : All components are listed or exempted. **Taiwan** : All components are listed or exempted.

**Thailand** : Not determined.

: All components are listed or exempted. Turkey **United States (TSCA 8b)** : All components are active or exempted. : All components are listed or exempted. **Viet Nam** 

## **Section 16. Other information**

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







#### Section 16. Other information

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 SDSs 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.

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



#### Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 2	Expert judgment
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	On basis of test data
CARCINOGENICITY - Category 1A	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method

#### **History**

Date of issue/Date of

revision

: 06/15/2020

Date of previous issue

: 02/15/2019

Version

: 5

Prepared by Key to abbreviations : KMK Regulatory Services Inc.: 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)

N/A = Not available SGG = Segregation Group

UN = United Nations

References : Not available.

#### 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.

