Safety Data Sheet (SDS)

The content and format of this SDS is accordant with GHS standard.

1. Identification of the substance/preparation and of the company/undertaking
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Product details:
Product name: <u>RIO TUBA QUICKLIME PRODUCTS</u>
Other Names: LUMP QUICKLIME; QUICKLIME POWDER
Recommended use of the chemical and restrictions on use: Sugar processing, pH adjustment, road stabilization,
metallurgical processing, milk of lime manufacture. Restrictions on use: No relevant information.
Manufacturer/Supplier: GRAYMONT
Address: Unit 3004 30th Floor NAC Tower, 32nd Street, Bonifacio Global City, Taguig 1635 PHILIPPINES
Department:
Tel.: 1800 081 881
Fax:
Email: customersupportMY@graymont.com
Further information obtainable from: GRAYMONT
Information in case of emergency (in Philippines): 63 2 8231 2149 (English, Tagalog)
Available 24 hours a day / 7 days a week
Information in case of emergency (Asia-Pacific countries outside Philippines): 65 3158 1074 (English, Bengali,
Cantonese, Indonesian, Hindi, Japanese, Korean, Malay, Sinhalese, Urdu, Tagalog, Thai, Vietnamese)
Available 24 hours a day / 7 days a week

2. Hazards identification

GHS classification:	
Physical hazards	Not classified.
Health hazards	Skin corrosion/irritation - Category 2
	Serious eye damage/eye irritation - Category 1
	Carcinogenicity - Category 1A (It is only respirable when it is dried or in powdered
	form)
	Specific target organ toxicity, single Exposure - Category 3 (Respiratory tract irritation)
Environmental hazards	Not classified.

Signal Word: Danger

Pictogram:



Hazard Statements: H315: Causes skin irritation. H318: Causes serious eye damage. H335: May cause respiratory irritation. H350: May cause cancer (It is only respirable when it is dried or in powdered form).

Precautionary Statements:

P201: Obtain special instructions before use.

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

P261: Avoid breathing dust/fume/gas/mist/ vapours/spray.

P264: Wash hands thoroughly after handling.

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

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response Precautionary Statements:

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

P321: Specific treatment (Please see the specific measures included on product label, or go to hospital for treatment).

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

P362 + P364: Take off contaminated clothing and wash it before reuse.

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

P310: Immediately call a POISON CENTER/doctor.

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312: Call a POISON CENTER/doctor if you feel unwell.

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

Storage precautionary statements:

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

Disposal precautionary statements:

P501: Dispose of contents/container according to relevant local and national regulations (It is recommended to use methods of neutralization to dispose of waste).

Other hazards: Reacts violently with water.

3. Composition/information on ingredients

Product description: substance (); preparation/mixture ($\sqrt{}$)

Ingredient (s)	CAS No.	EC No.	% by weight
Calcium oxide	1305-78-8	215-138-9	84
Calcium hydroxide	1305-62-0	215-137-3	10
Calcium Carbonate	471-34-1	207-439-9	5
Quartz [Silica Crystalline]	14808-60-7	238-878-4	<1

· Contains less than 1% respirable crystalline silica.

• 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. If a generic chemical name is shown and/or the CAS number is not disclosed, the specific chemical identity has been withheld as a trade secret.

· There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations

applicable, are classified and hence require reporting in this section.

4. First aid measures

Persons using this product should consult a physician or other medical professional if an accident involving this product results in injury. Specific first-aid measures are as follows:

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact: Wash with plenty water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Eyes Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Ingestion: Rinse mouth. Do not induce vomiting without professional instruction. Call a POISON CENTER/doctor if you feel unwell.

Acute effect and delayed effect:

Acute effect: Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.

Delayed effect: May cause cancer (It is only respirable when it is dried or in powdered form).

Personal protective equipment: Wear protective gloves/protective clothing/eye protection/face protection when necessary.

Indication of immediate medical attention and treatment needed, if necessary: Treat according to symptoms and exposure dose.

5. Fire-fighting measures

Extinguishing Media: Water fog. CO₂, dry chemical, dry sand, foam. Do not use straight water streams. Discharging cylinder shape water from fire hose may lead to spread fire to the surroundings.

Special hazards arising from the chemical: This product is not combustible. Reactions with water can generate heat to ignite nearby combustible materials. Products of combustion may include, and are not limited to: Oxides of calcium, carbon monoxide and carbon dioxide.

Fire Fighting Method:

Shut off air supply.

Extinguish fire from upwind and cool down containers by water spray.

Remove containers from fire area if it can be done without risk.

Deny unnecessary entry to the place around the fire.

Firefighters must wear self-contained breathing apparatus and full protective equipment.

Special actions for fire-fighters: Firefighters must wear self-contained breathing apparatus and full protective equipment.

Check whether the protective equipment is in good condition before use.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use proper personal protective equipment as indicated in Section 8.

Environmental precautions: Keep cleaning run-offs out of municipal sewers and open bodies of water. Comply with local and national laws and regulations.

Methods and material for containment and cleaning up:

Cover with plastic sheet to prevent spreading.

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Avoid generating dust during collection and clean-up.

7. Handling and storage

Precautions for safe handling:

Obtain special instructions before use.

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

Avoid breathing dust/fume/gas/mist/ vapours/spray.

Wash hands thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated and dry place. Keep container tightly closed. Extremes of temperature and direct sunlight. Avoid formation and deposition of dust. Ensure storage conditions comply with applicable local and national regulations **Incompatible substances or mixtures:** Strong oxidising agents. Water, strong acids, halogens and metals. **Packing material:** No information available.

8. Exposure controls/personal protection

Occupational Exposure Limits:

Ingredients	Philippines Workplace exposure limits -TWA	ACGIH TLV-TWA
Calcium oxide (CAS: 1305-78-8)	5 mg/m ³	2 mg/m^3
Calcium hydroxide (CAS: 1305-62-0)		5 mg/m^3
Calcium Carbonate (CAS: 471-34-1)		
Quartz [Silica Crystalline]	Total dust: 7.5 mg/m ³	$0.025 m_{\pi}/m^{3}$
(CAS: 14808-60-7) *	Respirable: 3.33 mg/m ³	0.025 mg/m^3

X: Crystalline silica is a Category 1A carcinogen.

*: TWA (Time Weighted Average): Defined as time-weighted average concentration limits for a normal 8-hour workday, with a total of 40 hours per week.

No biological limits allocated.

Engineering Controls:

Use this product only in closed systems fully or with local exhaust ventilation.

Install emergency eyewash and shower equipment in accordance with national regulations, and / or most recent ANSI Z358.1 requirements.

If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure

standards, suitable respiratory protection must be worn.

Personal Protective Equipment (For workers):

Protection of Hands:

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant

regulations.



Protection of Eyes: Wear safety glasses when working in a dusty environment. Eye protection devices should conform with the American National Standards for Occupational Eye and Face Protection Equipment (ANSI z87.1).



Respiratory Protection: Use an approved respirator if exposure limits are exceeded or if irritation or other symptoms occur. Respiratory Protection devices should conform with the American National Standards Practices for Respiratory Protection (ANSI z88).



Protection of Body: Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.



.General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Avoid contact with eyes and skin.

9. Physical and chemical properties

General Information	
Form	Solid - Granules
Color	Off white
Odor	Odourless
pH Value	12.0
Boiling range	No data available
Melting point/Melting range	2570°C
Freezing Point	No data available
Flash Point	No data available
Flammable/Explosive Limits-Lower Vol %	No data available

Flammable/Explosive Limits-Upper Vol %	No data available
Specific Gravity	3.20 - 3.40
Vapor pressure	No data available
Vapor density	No data available
Solubility	No data available
n-octanol/Water partition coefficient	No data available
Autoignition Temperature	No data available
Decomposition temperature	No data available
Odor threshold	No data available
Viscosity	No data available
Evaporation rate	No data available
Flammability (solid, gas, etc.)	Non-flammable

10. Stability and reactivity

Reactivity and Chemical stability: Stable under normal storage conditions.

Possibility of hazardous reactions: Reacts with incompatible materials. Reacts violently with water.

Conditions to Avoid: Extremes of temperature and direct sunlight. Avoid formation and deposition of dust. Contact with incompatible materials.

Incompatible materials: Strong oxidising agents. Water, strong acids, halogens and metals.

Hazardous decomposition products: Products of combustion may include, and are not limited to: Oxides of calcium, carbon monoxide and carbon dioxide.

11. Toxicological information Product Toxicity Data:

Ingredient (s)	CAS number	LD 50/LC 50 (Median lethal dose)
Calcium hydroxide	1305-62-0	Acute toxicity (oral) LD ₅₀ : 7,340 mg/kg (rat)
		Data source: ECHA
Calcium Carbonate	471-34-1	Acute toxicity (oral) LD ₅₀ >2,000 mg/kg (rat)
		Data source: ECHA
		Acute toxicity (dermal) LD ₅₀ >2500 mg/kg (rat)
		Data source: ECHA
Calcium oxide	1305-78-8	Acute toxicity (oral) LD ₅₀ >2,000 mg/kg (rat)
		Data source: ECHA
		Acute toxicity (dermal) LD ₅₀ >2500 mg/kg (rabbit)
		Data source: ECHA
		Acute toxicity (inhalation: dust) $LC_{50} \ge 6.04 \text{ mg/L/4h}$ (rat)
		Data source: ECHA
Quartz [Silica Crystalline]	14808-60-7	No data available
Classification of the whole product:		Not classified.

Skin corrosion/irritation	Calcium hydroxide (CAS: 1305-62-0): Category 2 (Data source:
	ECHA)
	Calcium oxide (CAS: 1305-78-8): Category 2 (Data source: ECHA)
	Classification of the whole product: Category 1 (pH=12.0)
Serious eye damage/eye irritation	Calcium hydroxide (CAS: 1305-62-0): Category 1 (Data source:
2010022 ty t 200110gt ty t 1100000	ECHA)
	Calcium oxide (CAS: 1305-78-8): Category 1 (Data source: ECHA)
	Classification of the whole product: Category 1
Sensitisation, skin	No classification for this product.
Sensitisation, respiratory	No classification for this product.
Germ cell mutagenicity	No classification for this product.
Carcinogenicity	Quartz [Silica Crystalline] (CAS: 14808-60-7): Category 1A (Data
	source: IARC-1) (It is only respirable when it is dried or in
	powdered form)
	Classification of the whole product: Category 1A (It is only
	respirable when it is dried or in powdered form)
Reproductive Toxicity	No classification for this product.
Specific target organ toxicity, single Exposure	Calcium hydroxide (CAS: 1305-62-0): Category 3 (Respiratory
	tract irritation) (Data source: ECHA)
	Calcium oxide (CAS: 1305-78-8): Category 3 (Respiratory tract
	irritation) (Data source: ECHA)
	Classification of the whole product: Category 3 (Respiratory tract
	irritation)
Specific target organ toxicity, repeated exposure	Quartz [Silica Crystalline] (CAS: 14808-60-7): Category 1 (lung)
	(Data source: ECHA)
	Classification of the whole product: Not classified
Aspiration hazard	No classification for this product.
Ingestion	Ingestion of this product may irritate the gastric tract causing nausea and vomiting.
Inhalation	May cause respiratory irritation. Inhalation of product dust can cause
	irritation of the nose, throat, and respiratory system. Chronic exposure to
	this material may aggravate existing respiratory disorders and lung
	disorders such as bronchitis, emphysema, and asthma. Onset and
	progression are related to dust concentrations and duration of exposure.
	Repeated exposure to respirable crystalline silica dust may lead to
	silicosis, or other serious delayed lung injury. The onset of silicosis is
	usually slow and lung damage may occur even when no symptoms or
	signs of ill-health have occurred. Silicosis can develop to a more serious
	degree even after exposure has ceased and may also lead to other
	diseases including heart disease and scleroderma. Exposure by
	inhalation may aggravate pre-existing upper respiratory and lung

	disorders such as bronchitis, emphysema, and asthma.
Skin	Causes skin irritation. Skin contact will cause redness, itching and
	swelling. Repeated exposure may cause skin dryness and cracking and
	may lead to dermatitis.
Eye	Causes serious eye damage. Eye contact will cause stinging, blurring,
	tearing, severe pain and possible burns, necrosis, permanent damage,
	and blindness.
Carcinogenicity	Crystalline silica (quartz) is listed as Group 1: Carcinogen to humans,
	according to International Agency for Research on Cancer (IARC).

12. Ecological information

Ecotoxicity:

Calcium hydroxide (CAS: 1305-62-0): 96h- LC₅₀: 4,630 mg/L, fish (Pimephales promelas) (ECHA) Calcium Carbonate (CAS: 471-34-1): 96h- LC₅₀>100 mg/L, fish (ECHA) Calcium oxide (CAS: 1305-78-8): 96h- LC₅₀: 457 mg/L, fish (Gasterosteus aculeatus) (ECHA) Classification of the whole product: Not classified. Persistence and Degradability: No data available. Bioaccumulative Potential: No data available. Mobility in Soil: No data available. Environmental Protection: Prevent this material from entering waterways, drains, and sewers.

13. Disposal considerations

Waste treatment methods:

It is recommended to use methods of neutralization to dispose of waste.

Any disposal practice must be in compliance with country, local, state, and federal laws and regulations.

After contents are completely removed, dispose of its container at hazardous or special waste collection point.

Paste a label on the container indicating the possible hazards of the waste.

14. Transport Information

DOT/Air-Transportation- IATA/ICAO/Sea-Transportation-IMO/IMDG:

Road and Rail: Not classified as Dangerous Goods for transport by road and rail. Marine Transport (IMO/IMDG): Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

SP 106: Subject to these Regulations only when transported by air.

Proper Shipping Name: CALCIUM OXIDE

Hazard Class: 8 UN Code: 1910 Packing Group: III Packing Group Symbol:



Marine Pollutant (Yes/No): No EMS NO.: Not applicable

Note:

Check whether the package is completed or sealed before transporting; make sure no damage of packages and prevent goods from falling down during transporting; the transport vehicle should be equipped with facilities for fire-fighting and accidental release handling; do NOT transport this product together with incompatible substances; stay away from fire and areas of high temperature during stopovers.

15. Regulatory information

The Philippines:

Philippine Priority Chemicals List (PCL): Not applicable.

Philippine Inventory of Chemicals and Chemical Substances (PICCS): Ingredients with specific CAS numbers are listed. List of Chemical Control Order (CCO): Not applicable.

List of Ozone Depleting Substances (ODS): Not applicable.

United States:

Section 355 (extremely hazardous substances): Not listed.

SARA 313: Not listed.

TSCA (Toxic Substance Control Act):

Ingredient (s)	CAS No.	TSCA Inventory
Calcium oxide	1305-78-8	Listed
Calcium hydroxide	1305-62-0	Listed
Calcium Carbonate	471-34-1	Listed
Quartz [Silica Crystalline]	14808-60-7	Listed

Clean Water Act:

Chemical Name	Reportable Quantities	Hazardous Substances	Priority Pollutants	Toxic Pollutants
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

.Carcinogenicity categories: Quartz [Silica Crystalline] (CAS: 14808-60-7): IARC-1.

<u>EU:</u> (EC) 1272/2008 Annex VI Table 3.1:

Ingredient(s)	EC No. 1272/2008 Classif	EC No. 1272/2008 Classification		
	CLASS. CODE	HAZARD CODE		
Not applicable	Not applicable	Not applicable		
Candidate List of Substar	ces of very high concern (SVHC) acc	ording to ECHA: Not listed.		
REACH Regulation Anne	x XVII Regulation List: Not listed.			
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REACH Regulation Annex XIV Authorization List: Not listed.

Chemical Safety Assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

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References:

The fourth revision of GHS DENR Administrative Order No. 2015-09 GHS Guidance Manual

Full description of some acronyms:

GHS-Globally Harmonized System of Classification and Labelling of Chemicals CAS-Chemical Abstracts Service EINECS-European Inventory of Existing Commercial Chemical Substances IMO-International Maritime Organization IMDG-International Maritime Dangerous Goods IATA-International Air Transport Association ICAO-International Civil Aviation Organization TSCA-Toxic Substances Control Act OSHA-Occupational Safety and Health Administration ACGIH-American Conference of Governmental Industrial Hygienists

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