SAFETY DATA SHEETS

This SDS packet was issued with item: 074312773

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

074312781 074314746 074314779

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

074311502 074311528 074312757

KERR

Material Safety Data Sheet in accordance with Community Regulation 2006/1907/EC (R.E.A.Ch.)

Revision Date: 03rd May 2009

SECTION 1 Product & Company identification

- 1.1 <u>Product name</u> SNOW WHITE PLASTER N°2
- 1.2 <u>Uses/Application</u>: Dental impression material. – Dental stone
- 1.3 <u>Company (Name, address and info phone number)</u> **KERR ITALIA s.r.l.** Via Passanti, 332 84018 Scafati (SA) - Italy +39-081-850-8311
- 1.4 <u>Emergency phone</u> (according to communitarian directive 99/45/EC, article 17) +39.081.8508.325 (08.00-17.00, European time, GMT+1) E-mail address: <u>safety@kerrhawe.com</u>

SECTION 2 Hazard identification

2.1 <u>Hazard classification</u> (according to communitarian directives 67/548/EEC & 99/45/EC) None.

2.2 Other hazard

None.

SECTION 3

Composition/Information on Ingredients

(according to communitarian directives 67/548/EEC, 99/45/EC & 2001/58/EC)

3.1 Hazardous ingredients

HAZARDOUS INGREDIENTS	%	HAZARD SYMBOLS	RISK PHRASES	CAS N.	EINECS N.
None	N/A	N/A	N/A	N/A	N/A

3.2 Other non-hazardous ingredients

Calcium Sulphate (CaSO₄), peppermint oil.

SECTION 4 First aid measures

<u>4.1 Treatment for eye contact:</u> Flush with water to remove particles. If irritation continues, consult a physician.

4.2 Treatment for skin contact: Wash with water and soap.

4.3 Treatment for inhalation (breathing): Remove to fresh air.

4.4 Treatment for ingestion (swallowing): Consult a physician.

SECTION 5 Fire-fighting Measures

5.1 Suitable extinguishing media: Not applicable.

5.2 Forbidden extinguishing media: Not applicable.

5.3 Special fire fighting measures: None.

5.4 Unusual fire and explosion hazards: None.

5.5 Special protection equipment: Not applicable.

SECTION 6 Accidental Release Measures

6.1 Personal Precautions: Avoid skin contact. When dusty conditions exist, wear an approved dust mask.

6.2 Environmental Precautions: None.

<u>6.3 Reclaiming Methods:</u> Ventilate area of spill or release. Use dustless methods (vacuum) and place into closable container for disposal. Do not dry sweep.

SECTION 7

Handling and Storage (according to article 5 of communitarian directive 98/24/EC)

7.1 Handling Precautions: Do not breathe dust. Moisture or water will harden the product.

7.2 Precautions in case of Fire and Explosion: None.

<u>7.3 Storage Conditions</u>: Keep container closed. Presence of moisture or water during storage will harden the product.

7.4 Suggested container(s): Use containers provided by manufacturer.

7.5 Indication for Combined Storage: Avoid contact with acids.

7.6 Environmental precautions: The product is considered not dangerous for environment.

7.7 Other Precautions: Use according to directions.

SECTION 8

SECTION 8 Exposure controls/personal protection				
8.1 Exposure Limits:	Calcium Sulphate : <u>TWA</u> : 10 mg/m ³ ; <u>PEL</u> : 5 mg/m ³ (breathable fraction)			
8.2 Exposure control measures				
8.2.1 Precautionary Measu				
(accoraing to communita	rian directives 89/686/EEC & article 4 of 98/24/EC)			
Ventilation:	<u>Local Exhaust Ventilation</u> : Provide general ventilation and local exhaust ventilation to meet hazardous threshold requirements. <u>Special Ventilation</u> : Not applicable.			
	<u>Mechanical (General) Ventilation</u> : Not applicable. <u>Other Ventilation</u> : Not applicable.			
Respiratory Protection:	When dusty conditions exist, wear an approved dust mask			
Hands Protection:	Gloves are usually not necessary, but may be desirable in specific work environments.			
Eyes Protection:	Goggles may be needed to avoid particulate irritation of the eye.			
Skin Protection:	Handle in accordance with good personal hygiene and safety practices.			
Other Protective Equipments:	It would be better use a lab coat.			
Measures listed in this paragraph are to be considered as indications and NOT prescriptions (89/656/EEC)				

8.2.2 Environment exposure control measures Not Applicable.

SECTION 9 Physical and Chemical Properties		
9.1 General information		
Appearance: White-off powder	<u>Odour</u> : Mint odour	
9.2 Information related to health, safety and envir	conment	
<u>pH</u> : ~ 7	<u>Relative density</u> : 0,88 – 1,12 g/ml	
Boiling point: Not applicable (N/A)	Specific gravity ($H_2O = 1$): 2,5 g/ml	
<u>Flash point</u> : N/A	Solubility: 0,67 – 0,88 g/100g of solution	
<u>Flammability</u> : Not flammable.	Partition coefficient n-octanol/water: N/D	
Lower Explosivity Limit (L.E.L.): N/A	<u>Viscosity</u> : N/A	
Upper Explosivity Limit (U.E.L.): N/A	<u>Vapour density (air = 1)</u> : N/A	
Oxidizing properties: N/A	Evaporation rate (n-butane = 1): N/A	
Vapour pressure: N/A	Melting point: Not applicable	
9.3 Other information (according to communitarian dire	ctives 94/9/EC):	
Miscibility: N/A.	Conducibility: N/A	
Solubility in Lipids: N/A	Gases Group: N/A	

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SECTION 10 Stability and Reactivity

Stability: Stable.

<u>10.1 Conditions to avoid</u>: Contact with acids.

10.2 Materials to avoid (incompatibility): Acids.

10.3 Hazardous decomposition products: Sulphur dioxide and calcium oxide (Above 1450°C).

Other precautions:

Hazardous Polymerization Products: Will not occur

Safety significance in case of change in physical appearance: Not applicable

Stabilizers: No stabilizers are present in this product.

SECTION 11 Toxicological Information

<u>CMR effects (Carcinogenicity, Mutagenicity and toxicity for reproduction)</u>: None.

Effects and hazards of eye contact: Particles may cause irritation, burning, redness, itching and pain.

Effects and hazards of skin contact: May develop sufficient heat to cause burns if large mass is in contact with skin while hardening. May dry skin.

Effects and hazards of Inhalation (Breathing): Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions: coughing, sneezing and nasal irritation from dust.

Effects and hazards of Ingestion (Swallowing): Plaster hardens when wetted and if ingested, may result in an obstruction.

Effects for prolonged Exposure: None

Toxic-kinetic effects: Unknown.

Effects on metabolism: Unknown.

Toxicological data for ingredients:

Calcium Sulphate (Acute toxicity):	LD ₅₀ (oral rat)	> 5000 mg/Kg
Peppermint oil	LD ₅₀ (oral rat)	2650 mg/Kg
	LD ₅₀ (skin rabbit)	> 5 mg/Kg

SECTION 12 Ecological Information

This product has not known ecological hazardous effects.

12.1 Eco-toxicity: Not available

12.2 Mobility: Not available

12.3 Persistence and degradability: Not available.

12.4 Bioaccumulative potential: Not available.

12.5 Results of PBT (Persistent Bio-Toxicity) assessment: Not available

12.6 Other adverse effects: Not available

Aquatic toxicity data for single ingredient:

None.

SECTION 13

Disposal considerations

Dispose of in accordance of local regulations.

SECTION 14 Transport information

<u>14.1 Sea transportation (IMDG)</u> The product is not regulated.

<u>14.2 Air transportation (ICAO/IATA)</u> The product is not regulated.

<u>14.3 Transportation by Road/Railway (RID/ADR)</u> The product is not regulated.

SECTION 15 (Classification according to communitarian directives 67/548/EEC & 99/45/EC) **Regulatory information**

None.

SECTION 16 Other information

16.1 Risk phrases of all ingredients

None.

16.1.1 Safety phrases of all ingredients

None

16.2 Sources of key data used to compile the Safety Data Sheet:

European Chemicals Bureau (ECB – <u>www.ecb.jrc.it</u>) European chemical Substances Information System (ESIS - <u>www.ecb.jrc.it/esis</u>) A.C.G.I.H. (<u>www.acgih.org</u>) N.I.OS.H. (<u>www.cdc.gov/niosh/</u>) O.S.H.A. (<u>www.osha.gov/</u>) U.E. (<u>www.europa.eu/index_it.htm</u>) I.A.R.C. (<u>www.iarc.fr/</u>) N.T.P. (<u>www.ntp.niehs.nih.gov</u>)

European Community Directives:

67/548/EEC:	Classification, packaging and labelling of dangerous substances.
99/45/EC:	Directive concerning the approximation of the laws, regulations and administrative
	provisions of the Member States relating to the classification, packaging and labelling of
	dangerous preparations.
2001/58/EC:	Second amendment of directive 91/155/EEC for the definition of a detailed arrangement
	of specific information relating to dangerous preparations (art. 14 of 99/45/EC) and
	substances (art. 27 of 67/548/EEC).
89/656/EEC:	Directive on the minimum health and safety requirements for the use by workers of
	personal protective equipment at the workplace (third individual directive within the
	meaning of Article 16 (1) of Directive 89/391/EEC).
89/686/EEC:	Approximation of the laws of the Member States relating to personal protective
	equipment.
94/9/EC:	Approximation of the laws of the Member States concerning equipment and protective
	systems intended for use in potentially explosive atmospheres
98/24/EC:	Protection of the health and safety of workers from the risks related to chemical agents at
	work.

Document modification history: First version in compliance of Community Regulation 2006/1907/EC (R.E.A.Ch.)

CAUTION: PRODUCT FOR PROFESSIONAL USE

The information on this Safety Sheet is based on presently available data and to our best knowledge for the correct handling of the product under normal conditions. Any use of this product in any way not indicated on this Sheet or the use of this product together with any other process/procedure will be exclusively under the user's responsibility. This document does not constitute explicit or implicit warranty of product quality or fitness for a particular purpose.



Kerr SAFETY DATA SHEET

Snow White Plaster #2

Section 1. Identification				
GHS product identifier	: Snow White Plaster #2			
Other means of identification	: Not available.			
Product type	: Powder.			
Relevant identified uses of t	the substance or mixture and uses advised against			
Product use	: Dental product: Stones and plasters			
Area of application	: Professional applications.			
Manufacturer	: Kerr Corporation 1717 West Collins Avenue Orange, CA 92867-5422 Telephone no.: 1-800-KERR-123			
e-mail address of person responsible for this SDS	: edwin.varela@kavokerrgroup.com			
Emergency telephone number (with hours of operation)	: CHEMTREC® (24 hours) U.S. : 1-800-424-9300 International: +1-703-527-3887			

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	: COMBUSTIBLE DUSTS SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 CARCINOGENICITY - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (lungs) - Category 1 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 100%
<u>GHS label elements</u> Hazard pictograms	
Signal word	: Danger
Hazard statements	 May form combustible dust concentrations in air. Causes severe skin burns and eye damage. May cause cancer. Causes damage to organs through prolonged or repeated exposure. (lungs)
Precautionary statements	
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Section 2. Hazards identification

Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Do not breathe dust or mist. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. 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 physician.
Storage	: Store locked up.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not taste or swallow. Wash thoroughly after handling. Prevent dust accumulation.
Hazards not otherwise classified	: Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat. Causes digestive tract burns.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

CAS number Product code	Not applicableNot available.			
Ingredient name		Other names	%	CAS number
Cement, portland, chemicals		Cement, portland, chemicals	1-5	65997-15-1
Limestone calcium dihydroxide		Limestone calcium dihydroxide	1-5 1-5	1317-65-3 1305-62-0

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 and hence require reporting in this section.

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 10 minutes. Chemical burns must be treated promptly by a physician.

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Section 4. First aid measures

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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 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 eff	ects	
Eye contact	: Causes serious eye damage.	
Inhalation	: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.	
Skin contact	: Causes severe burns.	
Ingestion	: Corrosive to the digestive tract. Causes burns.	
Over-exposure signs/syn	nptoms	
Eye contact	: Adverse symptoms may include the following: pain watering redness	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing	
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur	
Ingestion	: Adverse symptoms may include the following: stomach pains	
Indication of immediate m	edical 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	: No specific treatment.	
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Section 4. First aid measures

Protection of first-aiders 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		
mediaUnsuitable extinguishing media: Do not use water jet.Specific hazards arising from the chemical: Fine dust clouds may form explosive mixtures with air.Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon monoxide sulfur oxides metal oxide/oxides calcium oxideSpecial 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.Special protective training: Fire-fighters should wear appropriate protective equipment and self-contained breathing	Extinguishing media		
mediaSpecific hazards arising from the chemical: Fine dust clouds may form explosive mixtures with air.Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides calcium oxideSpecial 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.Special protective: Fire-fighters should wear appropriate protective equipment and self-contained breathing		: Use dry chemical powder.	
from the chemicalHazardous thermal decomposition products: Decomposition products: Decomposition products: Decomposition products: Carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides calcium oxideSpecial 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.Special protective: Fire-fighters should wear appropriate protective equipment and self-contained breathing		: Do not use water jet.	
decomposition productscarbon dioxide carbon monoxide sulfur oxides metal oxide/oxides calcium oxideSpecial 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.Special protective: Fire-fighters should wear appropriate protective equipment and self-contained breathing	· · · · · · · · · · · · · · · · · · ·	: Fine dust clouds may form explosive mixtures with air.	
for fire-fightersthere is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.Special protective: Fire-fighters should wear appropriate protective equipment and self-contained breathing		carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides	
		there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water	
equipment for fire-fighters apparatus (SCBA) with a full face-piece operated in positive pressure mode.	Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.	

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

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Section 6. Accidental release measures

Small spill	: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.
Large spill	: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Avoid creating dusty conditions and prevent wind dispersal. 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 breathe dust. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. 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. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. 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 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 locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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

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Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Cement, portland, chemicals	ACGIH TLV (United States, 4/2014). TWA: 1 mg/m ³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2013).
	TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction
	TWA: 10 mg/m ³ 10 hours. Form: Total OSHA PEL (United States, 2/2013).
	TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
	TWA: 15 mg/m ³ 8 hours. Form: Total dust OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m ³ 8 hours. Form: Respirable
	fraction TWA: 10 mg/m ³ 8 hours. Form: Total dust
Limestone	OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
	TWA: 15 mg/m ³ 8 hours. Form: Total dust NIOSH REL (United States, 10/2013).
	TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction
	TWA: 10 mg/m ³ 10 hours. Form: Total OSHA PEL (United States, 2/2013).
	TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust
calcium dihydroxide	ACGIH TLV (United States, 4/2014). TWA: 5 mg/m ³ 8 hours.
	OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m ³ 8 hours.
	OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
	TWA: 15 mg/m ³ 8 hours. Form: Total dust NIOSH REL (United States, 10/2013). TWA: 5 mg/m ³ 10 hours.

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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
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	

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Section 8. Exposure controls/personal protection

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.

Section 9. Physical and chemical properties

Appearance	
Physical state	: Solid. [Powder.]
Color	: White.
Odor	: Odorless./Peppermint-like.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: Not available.
Solubility	: Very slightly soluble in the following materials: cold water and hot water.
Solubility in water	: Not available.
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Section 9. Physical and chemical properties

Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Not available.

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.	
	Under normal conditions of storage and use, hazardous polymerization will not occur.	
Conditions to avoid	: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.	
Incompatible materials	: Reactive or incompatible with the following 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/ingredient name	Result	Species	Dose	Exposure
Limestone calcium dihydroxide	LD50 Oral LD50 Oral		6450 mg/kg 7340 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
calcium dihydroxide	Eyes - Severe irritant	Rabbit	-	10 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

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Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	• •	Route of exposure	Target organs
Limestone	Category 1	Inhalation	lungs

Aspiration hazard

Not 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	Exposure to airborne concentrations above statutory or recommended exposure may cause irritation of the nose, throat and lungs.	limits
Skin contact	Causes severe burns.	
Ingestion	Corrosive to the digestive tract. Causes burns.	
Symptoms related to the phy	al, chemical and toxicological characteristics	
Eye contact	Adverse symptoms may include the following: pain watering redness	
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing	
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 effect	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		

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Potential immediate

: Not available.

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Potential delayed effects	: Not available.
Potential chronic health eff	fects
Not available.	
General	: Causes damage to organs through prolonged or repeated exposure. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Carcinogenicity	: May cause cancer. 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

Not available.

Section 12. Ecological information

<u>Toxicity</u>			
Product/ingredient name	Result	Species	Exposure
calcium dihydroxide	Acute LC50 33884.4 µg/l Fresh water	Fish - Clarias gariepinus - Fingerling	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

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 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
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Section 13. Disposal considerations

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						
DOT Classification	IMDG	ΙΑΤΑ				
Not regulated.	UN3077	UN3077				
-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (aluminium sulphate). Marine pollutant (aluminium sulphate)	Environmentally hazardous substance, solid, n.o.s. (aluminium sulphate)				
-	9	e C				
-	Ш	Ш				
No.	Yes.	Yes.				
-	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4. 1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1. 1.8. <u>Emergency schedules (EmS)</u> F-A, S-F <u>Special provisions</u> 274, 335, 966, 967, 969	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5. 0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. Passenger and Cargo Aircraft Quantity limitation: 400 kg Packaging instructions: 956 Cargo Aircraft Only Quantity limitation: 400 kg Packaging instructions: 956 Limited Quantities - Passenger Aircraft Quantity limitation: 30 kg Packaging instructions: Y956 Special provisions A97, A158, A179, A197				
	DOT Classification Not regulated	DOT Classification IMDG Not regulated. UN3077 - ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (aluminium sulphate). Marine pollutant (aluminium sulphate) - 9 - 9 - III No. Yes. - This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4. 1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1. 1.8. Emergency schedules (EmS) F-A, S-F Special provisions				

Special precautions for user	: Transport within user's premises: always transport in closed containers upright and secure. Ensure that persons transporting the product know what event of an accident or spillage.								
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	: Not av	ailab	le.						
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Section 15. Regulatory information

•	-
U.S. Federal regulations	: TSCA 8(a) PAIR: tributyl phosphate
	TSCA 8(c) calls for record of SAR: tributyl phosphate
	United States inventory (TSCA 8b): All components are listed or exempted.
	Clean Water Act (CWA) 311: aluminium sulphate
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 (Essential Chemicals)	: Not listed
<u>SARA 302/304</u>	
Composition/information	on ingredients
No products were found.	
SARA 304 RQ	: Not applicable.
<u>SARA 311/312</u>	
Classification	: Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
· · · · · ·	· · · · · · · · · · · · · · · · · · ·

Composition/information on ingredients

Name	%	hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Cement, portland, chemicals	1-5		No.	No.	Yes.	No.
Limestone	1-5		No.	No.	No.	Yes.
calcium dihydroxide	1-5		No.	No.	Yes.	No.

SARA 313

Not applicable.

State regulations

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<u>California Prop. 65</u>				
Pennsylvania	 The following components are listed: CALCIUM SULFATE; LIMESTONE; CEMENT, PORTLAND, CHEMICALS; CALCIUM HYDROXIDE (CA(OH)2); STARCH; GYPSUM (CA(SO4).2H2O) 			
New Jersey	 The following components are listed: CALCIUM SULFATE; SULFURIC ACID, CALCIUM SALT (1:1); CALCIUM CARBONATE; LIMESTONE; SILICATE, PORTLAND CEMENT; CEMENT, PORTLAND, CHEMICALS; CALCIUM HYDROXIDE; HYDRATED LIME; GYPSUM 			
New York	: None of the components are listed.			
Massachusetts	The following components are listed: CALCIUM SULFATE; CALCIUM CARBONATE; PORTLAND CEMENT; CALCIUM HYDROXIDE; STARCH DUST			

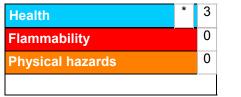
Section 15. Regulatory information

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	· · · · ·	level	Maximum acceptable dosage level
crystalline silica respirable	Yes.	No.	No.	No.

Section 16. Other information

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



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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

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.

<u>History</u>		
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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 = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)	
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Section 16. Other information

References

UN = United Nations

: HCS (U.S.A.)- Hazard Communication Standard International transport regulations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.