

ALFAA44786

## Soda lime, indicating

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**产品说明:** 碱石灰  
**Product Description:** Soda lime, indicating

**Cat No. :** 44786  
**Synonyms** A precipitate solid hydrate formed from Hydroxides of Calcium and Sodium  
**CAS No** 8006-28-8

**Supplier** Avocado Research Chemicals Ltd.  
(Part of Thermo Fisher Scientific)  
Shore Road, Heysham  
Lancashire, LA3 2XY,  
United Kingdom  
Office Tel: +44 (0) 1524 850506  
Office Fax: +44 (0) 1524 850608

**Emergency Telephone Number** For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

**E-mail address** begel.sdsdesk@thermofisher.com

**Recommended Use** Absorbent. Laboratory chemicals.  
**Uses advised against** No Information available

### SECTION 2. HAZARD IDENTIFICATION

**Physical State**  
Solid

**Appearance**  
White - Light grey

**Odor**  
Odorless

**Emergency Overview**

May be corrosive to metals. May be harmful in contact with skin. Causes severe skin burns and eye damage. May cause respiratory irritation.

#### Classification of the substance or mixture

Substances/mixtures corrosive to metal	Category 1
Acute Dermal Toxicity	Category 5
Skin Corrosion/Irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity - (single exposure)	Category 3

#### Label Elements



**Soda lime, indicating****Signal Word****Danger****Hazard Statements**

H290 - May be corrosive to metals  
 H313 - May be harmful in contact with skin  
 H314 - Causes severe skin burns and eye damage  
 H335 - May cause respiratory irritation

**Precautionary Statements****Prevention**

P234 - Keep only in original packaging  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P271 - Use only outdoors or in a well-ventilated area  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Response**

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 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 or doctor  
 P363 - Wash contaminated clothing before reuse  
 P390 - Absorb spillage to prevent material damage

**Storage**

P402 - Store in a dry place  
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
 P406 - Store in corrosion resistant polypropylene container with a resistant liner

**Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

**Physical and Chemical Hazards**

May be corrosive to metals.

**Health Hazards**

Corrosive. Causes serious eye damage. May be harmful in contact with skin. Causes skin and eye burns. May cause respiratory irritation.

**Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Is not likely mobile in the environment due its low water solubility. .

**Other Hazards**

This product does not contain any known or suspected endocrine disruptors.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
Calcium hydroxide	1305-62-0	75 - 85
Water	7732-18-5	10 - 20
Sodium hydroxide	1310-73-2	< 4
Ethanaminium, N-[4-[bis[4-(diethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, chloride	2390-59-2	<1
Soda lime	8006-28-8	-

**Note**

Soda lime CAS # 8006-28-8

**SECTION 4. FIRST AID MEASURES****General Advice**

If symptoms persist, call a physician.

**Soda lime, indicating****Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

**Most important symptoms and effects**

Causes severe eye damage. Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Self-Protection of the First Aider**

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

**Notes to Physician**

Treat symptomatically.

**SECTION 5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

**Extinguishing media which must not be used for safety reasons**

No information available.

**Specific Hazards Arising from the Chemical**

The product causes burns of eyes, skin and mucous membranes.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**SECTION 6. ACCIDENTAL RELEASE MEASURES****Personal Precautions**

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

**Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

**Methods for Containment and Clean Up**

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

**SECTION 7. HANDLING AND STORAGE****Handling**

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid

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ingestion and inhalation. Avoid dust formation.

**Storage**

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Specific Use(s)**

Use in laboratories

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters**

Component	China	Taiwan	Thailand	Hong Kong
Calcium hydroxide	-	TWA: 5 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
Sodium hydroxide	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>

Component	ACGIH TLV	OSHA PEL	NIOSH	The United Kingdom	European Union
Calcium hydroxide	TWA: 5 mg/m <sup>3</sup>	(Vacated) TWA: 5 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	REL = 5 mg/m <sup>3</sup> (TWA)	STEL: 4 mg/m <sup>3</sup> 15 min STEL: 15 mg/m <sup>3</sup> 15 min TWA: 1 mg/m <sup>3</sup> 8 hr TWA: 5 mg/m <sup>3</sup> 8 hr	TWA: 1 mg/m <sup>3</sup> (8h) STEL: 4 mg/m <sup>3</sup> (15min)
Sodium hydroxide	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup> STEL	

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

**Monitoring methods**

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

**Exposure Controls****Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

**Personal protective equipment**

**Eye Protection** Goggles (European standard - EN 166)

**Hand Protection** Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Neoprene	See manufacturers recommendations	-	EN 374	(minimum requirement)

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Skin and body protection** Long sleeved clothing

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

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appropriate certified respirators.  
To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

**Large scale/emergency use** Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced  
**Recommended Filter type:** Particulates filter conforming to EN 143

**Small scale/Laboratory use** Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.  
**Recommended half mask:-** Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141  
When RPE is used a face piece Fit Test should be conducted

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	White - Light grey	
<b>Physical State</b>	Solid	
<b>Odor</b>	Odorless	
<b>Odor Threshold</b>	No data available	
<b>pH</b>	12 - 14	Alkaline
<b>Melting Point/Range</b>	No data available	
<b>Softening Point</b>	No data available	
<b>Boiling Point/Range</b>	No information available	
<b>Flash Point</b>	Not applicable	<b>Method -</b> No information available
<b>Evaporation Rate</b>	Not applicable	Solid
<b>Flammability (solid,gas)</b>	No information available	
<b>Explosion Limits</b>	No data available	
<b>Vapor Pressure</b>	No information available	
<b>Vapor Density</b>	Not applicable	Solid
<b>Specific Gravity / Density</b>	0.9	
<b>Bulk Density</b>	No data available	
<b>Water Solubility</b>	Slightly soluble	
<b>Solubility in other solvents</b>	No information available	
<b>Partition Coefficient (n-octanol/water)</b>		
<b>Autoignition Temperature</b>	No data available	
<b>Decomposition Temperature</b>	No data available	
<b>Viscosity</b>	Not applicable	Solid
<b>Explosive Properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

## SECTION 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Hazardous Reactions</b>	None under normal processing.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	Exposure to air.
<b>Materials to avoid</b>	Halogenated solvents.

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Hazardous Decomposition Products Calcium oxides. Sodium oxides.

## SECTION 11. TOXICOLOGICAL INFORMATION

## Product Information

(a) acute toxicity;  
Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium hydroxide	LD50 > 2000 mg/kg ( Rat )	LD50 > 2500 mg/kg ( Rat )	LC50 > 6.04 mg/L ( Rat ) 4 h
Water	-	-	-
Sodium hydroxide	140 - 340 mg/kg ( Rat )	1350 mg/kg ( Rabbit )	

(b) skin corrosion/irritation; Category 1 B

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;  
Respiratory No data available  
Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available  
There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3  
Results / Target organs Respiratory system(i) STOT-repeated exposure; No data available  
Target Organs None known.(j) aspiration hazard; Not applicable  
Solid

Symptoms / effects, both acute and delayed Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

## SECTION 12. ECOLOGICAL INFORMATION

## Ecotoxicity effects

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Calcium hydroxide	LC50 = 160 mg/L, 96h static (Gambusia affinis)			

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Sodium hydroxide	LC50 = 45.4 mg/L, 96h static (Oncorhynchus mykiss)			
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**Persistence and Degradability****Persistence  
Degradability**

May persist, based on information available.  
Not relevant for inorganic substances.

**Bioaccumulative Potential**

May have some potential to bioaccumulate

**Mobility in soil**

Is not likely mobile in the environment due its low water solubility Highly mobile in soils

**Endocrine Disruptor Information  
Persistent Organic Pollutant  
Ozone Depletion Potential**

This product does not contain any known or suspected endocrine disruptors  
This product does not contain any known or suspected substance  
This product does not contain any known or suspected substance

**SECTION 13. DISPOSAL CONSIDERATIONS****Waste from Residues/Unused Products**

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging**

Dispose of this container to hazardous or special waste collection point.

**Other Information**

Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer. Large amounts will affect pH and harm aquatic organisms.

**SECTION 14. TRANSPORT INFORMATION****Road and Rail Transport**

**UN-No** UN3262  
**Proper Shipping Name** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
**Technical Shipping Name** Soda lime  
**Hazard Class** 8  
**Packing Group** III

**IMDG/IMO**

**UN-No** UN3262  
**Proper Shipping Name** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
**Technical Shipping Name** Soda lime  
**Hazard Class** 8  
**Packing Group** III

**IATA**

**UN-No** UN3262  
**Proper Shipping Name** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
**Technical Shipping Name** Soda lime  
**Hazard Class** 8  
**Packing Group** III

**Special Precautions for User**

No special precautions required

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## SECTION 15. REGULATORY INFORMATION

## International Inventories

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Taiwan (TCSI), Japan (ISHL), New Zealand (NZIoC), Japan (ISHL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	List of dangerous goods GB 12268 - 2012	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Calcium hydroxide	-	-	X	X	215-137-3	X	X	X	X	X	X	KE-04518
Water	-	-	X	X	231-791-2	X	X	X	X		X	KE-35400
Sodium hydroxide	X	X	X	X	215-185-5	X	X	X	X	X	X	KE-31487
Ethanaminium, N-[4-[bis[4-(diethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, chloride	-	-	X	X	219-231-5	X	X	X	-	X	X	-
Soda lime	X	X	X	X	-	-	-	X	-		X	-

Note Soda lime CAS # 8006-28-8

## National Regulations

## SECTION 16. OTHER INFORMATION

**Prepared By** Health, Safety and Environmental Department  
**Creation Date** 22-Jun-2008  
**Revision Date** 06-Sep-2025  
**Revision Summary** SDS sections updated.

## Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Chemical incident response training.

Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**PNEC** - Predicted No Effect Concentration

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

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**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

**Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Physical hazards**

On basis of test data

**Health Hazards**

Calculation method

**Environmental hazards**

Calculation method

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**