

SAFETY DATA SHEETS

This SDS packet was issued with item:

078433319

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

078199478 078433293 078433301



Quality Assurance/Regulatory Affairs

1720 Sublette Avenue St. Louis, MO 63110 Telephone: (314) 771-2400 FAX 314-268-1767

MATERIAL SAFETY DATA SHEET

CARBOLIME

Reviewed Date 9-21-01

1 IDENTIFICATION OF SUBSTANCE	Commercial Names Chemical Name	Sofolime/Medisorb/Viosorb/Durisorb/Presorb/Vivalyme/LSSA-Sorb/Simasorb Soda Lime CARBOLIME																	
2 COMPOSITION	<table border="1"> <thead> <tr> <th>Components</th> <th>% W/W</th> <th>CAS</th> <th>EINECS</th> <th>Supply Class</th> </tr> </thead> <tbody> <tr> <td>Sodium Hydroxide</td> <td>3%</td> <td>1310-73-3</td> <td>215-185-5</td> <td>C:R34</td> </tr> <tr> <td>Calcium Hydroxide</td> <td>>75%</td> <td>1305-62-0</td> <td>215-137-3</td> <td>N/A</td> </tr> </tbody> </table>				Components	% W/W	CAS	EINECS	Supply Class	Sodium Hydroxide	3%	1310-73-3	215-185-5	C:R34	Calcium Hydroxide	>75%	1305-62-0	215-137-3	N/A
Components	% W/W	CAS	EINECS	Supply Class															
Sodium Hydroxide	3%	1310-73-3	215-185-5	C:R34															
Calcium Hydroxide	>75%	1305-62-0	215-137-3	N/A															
3 HAZARDS IDENTIFICATION	Can cause burns to eyes and skin																		
4 FIRST AID MEASURE	Inhalation Skin Eyes Ingestion	Remove from exposure. Obtain medical attention. Drench with clean water. Obtain medical attention if skin becomes inflamed. Irrigate thoroughly with clean water. Obtain medical attention. Wash out mouth thoroughly. Obtain medical attention.																	
5 FIRE FIGHTING	Extinguishing Media Fire & Explosion Hazards Protective Measures	Water, Foam, CO ₂ , powder are all suitable. Material is non-combustible. Packaging may be combustible. Breathing apparatus may be needed.																	
6 ACCIDENTAL RELEASE	Personal Precautions Environmental Precautions Recovery	Avoid inhaling dust. Avoid skin and eye contact. No hazard. Contain material. Sweep or vacuum up.																	
7 HANDLING & STORAGE	Store in a clean dry environment. Avoid direct sunlight. Keep containers closed.																		
8 EXPOSURE CONTROLS	Occupational Exposure Limits	Component Sodium Hydroxide Calcium Hydroxide	TWA/8h 5mg/m ³	STE/15min 2mg/m ³															
PERSONAL PROTECTION	Respiratory Skin Eyes Hygiene	Nuisance dust mask recommended. General purpose rubber gloves. Glasses to protect against dust. Wash after skin contact.																	
9 PHYSICAL & CHEMICAL PROPERTIES	Appearance Odour pH Relative Density Solubility in water	White or coloured solids None 12-14 2.0 g/cm ³ Slight																	



Quality Assurance/Regulatory Affairs

1720 Sublette Avenue ☐ St. Louis, MO 63110 ☐ Telephone: (314) 771-2400 ☐ FAX 314-268-1767

MATERIAL SAFETY DATA SHEET

CARBOLIME

Reviewed Date 9-21-01

10 STABILITY & REACTIVITY	Material is stable. Converts to Calcium and Sodium Carbonates when exposed to air. Avoid contact with Chloroform or Trichloroethylene. Heat is generated when exposed to acids.	
11 TOXICOLOGICAL INFORMATION	Sodium Hydroxide Calcium Hydroxide	LD ₅₀ = 500mg/kg rat LD ₅₀ = 7.3g/kg rat
12 ECOLOGICAL INFORMATION	No risk of prolonged damage to animal or plant life. Converts to naturally occurring minerals.	
13 DISPOSAL CONSIDERATIONS	Disposal by licensed contractor and carrier.	
14 TRANSPORT INFORMATION	Transport Classification UN Number Hazard Class Packing Group	None None N/A N/A
15 REGULATORY INFORMATION	Supply Classification Risk Phrases Safety Phrases	Corrosive R34 Causes burns S2 Keep out of reach of children S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical attention S37/39 Wear suitable gloves and eye/face protection
16 OTHER INFORMATION	The intended use of this product is as an absorbent for Carbon Dioxide and other acidic gases. It is suitable for use in anaesthetic equipment, hyperbaric systems, breathing apparatus, diving equipment, air purification systems and as a general industrial reagent.	

FOR FURTHER INFORMATION CONTACT:
MOLECULAR PRODUCTS LTD, MILL END, THAXTED, ESSEX, CM16 2LT, UNITED KINGDOM
TEL: +44 (0) 1371 830676 FAX: +44 (0) 1371 830998 EMAIL: SALES@MOLECULARPRODUCTS.CO.UK

24 HOUR EMERGENCY TELEPHONE NUMBER : 0802 534621

THE INFORMATION IN THIS SAFETY DATA SHEET IS BASED ON BEST KNOWLEDGE AVAILABLE AT THE TIME AND CURRENT NATIONAL LEGISLATION. IT PROVIDES GUIDANCE ON HEALTH SAFETY AND ENVIRONMENTAL ASPECTS OF THE PRODUCT AND SHOULD NOT BE CONSTRUED AS ANY GUARANTEE OF TECHNICAL PERFORMANCE OR SUITABILITY FOR PARTICULAR APPLICATION. AS THE SPECIFIC CONDITIONS OF USE ARE OUTSIDE THE CONTROL OF THE SUPPLIER, THE USER IS RESPONSIBLE FOR ENSURING THAT THE PRODUCT IS USED IN A SAFE WAY AND THE REQUIREMENTS OF RELEVANT LEGISLATION ARE COMPLIED WITH.

Initials:



MATERIAL SAFETY DATA SHEET

CARBOLIME

PART NO: S232-104-001, Rev. D
MSDS DATE: September 1, 2011

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

Product Name: Carbolime
Synonyms: Sofnolime; Medisorb; Viosorb; Durasorb; Proisorb; Vivalylime; LSSA-Sorb; Stimasorb; Soda Lime

Manufacturer: Allied Healthcare Products, Inc.
Address: 1720 Sublette Avenue, St. Louis, MO 63110

Emergency Phone: 314-771-2400
CHEMTREC Phone: 800-262-8200
Other Calls: N/A
FAX Phone: 314-268-1767

Chemical Description: Soda lime

Product Use: CO₂ Absorbent
Prepared By: Stephen Mundwiller, Director QA & RA and Jack Dabrowski, Senior Product Manager

SECTION 2: COMPOSITION & INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
Calcium Hydroxide	1305-62-0	> 75%	N/A	N/A
Sodium Hydroxide	1310-73-2	3%	N/A	N/A
Ethyl Violet Indicator	2930-59-2	0.03%	N/A	N/A
Other ingredients		<1%	N/A	N/A

INGREDIENT	ACGIH TLV			OSHA PEL			OTHER
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
Calcium Hydroxide	-	-	-	5mg/m ³	2 mg/m ³	N/A	
Sodium Hydroxide	-	5mg/m ³	-	-	-	-	
Ethyl Violet Indicator	-	-	-	-	-	-	

SECTION 3: HAZARDS IDENTIFICATION

Routes of Entry: Mouth, skin, eyes
Potential Health Effects:
Eyes: Causes severe eye irritation
Skin: Causes mild skin irritation
Ingestion: Harmful if ingested
Inhalation: Dust can cause irritation to the respiratory system

Acute Health Hazards: Mild Irritant to throat
Chronic Health Hazards: N/A
Carcinogen: OSHA: N/A ACGIH: N/A NTP: N/A IARC: N/A OTHER: N/A
Medical Conditions Generally Aggravated by Exposure: N/A

SECTION 4: FIRST AID MEASURES

Eyes: Flush eyes with water for at least 15 minutes while holding eyelids open. Seek medical attention.
Skin: Wash with soap and water. If discomfort exists, consult a physician.
Remove contaminated clothing and wash before reuse.
Ingestion: Wash out mouth thoroughly. Seek medical attention.
Inhalation: Remove from exposure. Seek medical attention.

Notes to Physicians or First Aid Providers: Fresh Carbolime is a basic compound with a pH of 12-14.



MATERIAL SAFETY DATA SHEET

CARBOLIME

PART NO: S232-104-001, Rev. D
MSDS DATE: September 1, 2011

SECTION 5: FIRE-FIGHTING MEASURES

NFPA Hazard Classification:

Health: 2
Flammability: 0
Reactivity: 0
Other: N/A

Extinguishing Media: Water, foam, CO₂, powder – all are acceptable
Special Fire-fighting Procedures: Breathing apparatus may be necessary
Unusual Fire & Explosion Hazards: Material is non-combustible. Packaging may be combustible.
Hazardous Decomposition Products: N/A

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid inhaling dust; avoid skin and eye contact.
Environmental Precautions: No hazard
Recovery: Contain material. Sweep or vacuum up.

SECTION 7: HANDLING & STORAGE

Storage: Store in a clean dry environment. Avoid direct sunlight.
Keep containers closed.
Store in warehouse with typical temperatures ranging from 40° F to 100° F (4° C to 37.7° C)

SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION

Respiratory Protection: Nuisance dust mask recommended
Eye Protection: Goggles to protect against dust may be worn
Skin Protection: General purpose rubber or vinyl gloves recommended
Hygiene: Wash hands as soon as possible after skin contact

EXPOSURE GUIDELINES:

COMPONENT	TWA/8h	STEL (15 min)
Calcium Hydroxide	5 mg/m ³	N/A
Sodium Hydroxide	N/A	2 mg/m ³
Ethyl Violet Indicator	N/A	N/A

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Physical State: Solid
Appearance: Off-white solid
Odor: None
pH as Supplied: 12-14
Specific Gravity (H₂O = 1): 2.0 gm/cm³
Solubility in Water: Slight
Percent Solids by Weight: ≥ 82

SECTION 10: STABILITY & REACTIVITY

Stability: Material is stable.
Conditions to Avoid (stability): N/A
Incompatibility (material to avoid): Avoid contact with chloroform or trichloroethylene
Decomposition or By-products: Converts to calcium and sodium carbonates when exposed to air.
Heat is generated when exposed to acids.



MATERIAL SAFETY DATA SHEET

CARBOLIME

PART NO: S232-104-001, Rev. D
MSDS DATE: September 1, 2011

SECTION 11: TOXICOLOGICAL INFORMATION

Calcium Hydroxide: LD (50) = 7.3 g/kg rat
Sodium Hydroxide: LD (10) = 500 mg/kg rat

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No risk of prolonged damage to animal or plant life.
Mobility: Converts to naturally occurring minerals

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: May require disposal by a licensed contractor and carrier. Check local ordinances. Should be disposed of as non-contaminated clinical waste.
RCRA Hazard Class: N/A

SECTION 14: TRANSPORT INFORMATION

Transport Classification: Not classified as hazardous for transport by land, sea or air
Proper Shipping Name: Carbolime
UN Number: N/A
Hazard Class: N/A
Packing Group: N/A
Label Statement: N/A

SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations:
TSCA (Toxic Substance Control Act): YES
CERCLA (Comprehensive Response Compensation & Liability Act): YES
SARA Title III (Superfund Amendments & Reauthorization Act): N/A
311/312 Hazard Categories: N/A
313 Reportable Ingredients: N/A
State Regulations: YES
International Regulations: YES

SECTION 16: OTHER INFORMATION

Non-Hazardous Ingredient Disclosure:

<u>Chemical Name:</u>	<u>CAS Number</u>	<u>% WT</u>
Water	007732-18-5	16-18

DISCLAIMER:

The information in this safety sheet is based on best knowledge available at the time and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular application. As the specific conditions of use are outside the control of the supplier, the user is responsible for ensuring that the product is used in a safe manner and the requirements of relevant legislation are complied with.