

SAFETY DATA SHEETS

This SDS packet was issued with item:

078603367

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

078603375 078859823

W. R. GRACE
MATERIAL SAFETY DATA SHEET

Product Name: SODASORB® LF
MSDS ID Number: C-00671

MSDS Date: 06/13/2007

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: SODASORB® LF
MSDS Number: C-00671
Cancelled MSDS Number: C-00581
MSDS Date: 06/13/2007
Chemical Description: Inorganic Solid Blend
Product Use: Alkaline Carbon Dioxide absorbent
CAS # (Chemical Abstracts Service Number): Mixture - NA

Manufactured by:
DAREX
W.R.Grace & Co.-Conn.
62 Whittemore Avenue
Cambridge, MA 02140

In Case of Emergency Call: (617) 876-1400

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS#	Percent (max)
Calcium hydroxide	001305-62-0	50-100
Sodium hydroxide	001310-73-2	< 1

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:

Caution!
Causes severe eye irritation.
Causes skin irritation.
May be harmful if ingested.

HMIS Rating:

Health: 2
Flammability: 0
Reactivity: 0
Personal Protective Equipment: See Section 8

Potential Health Effects:

Inhalation: Dust can cause irritation and injury to the respiratory system
If inhaled as a vapor or mist, causes irritation, sore throat, coughing and breathing difficulty.
Effects include: No other effects expected unless listed below.
Eye Contact: Eye contact can cause severe irritation.
Prolonged eye contact can result in permanent damage.
Risk of serious damage to eyes.
Skin Contact: Skin contact causes irritation.
Prolonged skin contact can result in permanent damage.
Skin Absorption: Not expected to be harmful if absorbed through the skin.
Ingestion: Harmful if ingested.
Effects include: No other effects expected unless listed below.

SECTION 4 - FIRST AID MEASURES:

Skin Contact: Wash with soap and water.
If discomfort or irritation persists, consult a physician.
Remove contaminated clothing and wash before reuse.
Eye Contact: Flush eyes with water for at least 15 minutes while holding eyelids open.
Get immediate medical attention.
Ingestion: Do not induce vomiting.
Never give anything by mouth to an unconscious person.
Call a physician.
Dilute with weak vinegar solution or a 5% solution of ammonia chloride if available. If not, dilute with large quantities of water.
Inhalation: If symptoms develop, get fresh air. If symptoms persist, consult a physician.
If breathing has stopped, give artificial respiration then oxygen if needed.

SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

Flash Point: Not Flammable
Flash Point Method: Not Applicable
Lower Explosion Limit: Not Available

Upper Explosion Limit: Not Available
Auto-Ignition Temperature: Not Available

NFPA Rating:

Health: 2
Flammability: 0
Reactivity: 0

Extinguishing Media: In case of fire, use water spray, dry chemical, Carbon dioxide or foam.
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: Keep all SODASORB® LF that has been used with highly flammable anesthetics away from heat, sparks, and open flames, as residual amounts of these materials will be present.

SECTION 6 - ACCIDENTAL RELEASE MEASURES:

Spills/Leaks: Carefully shovel or sweep up spilled material and place in suitable container for disposal, do not use material in anesthesia circuit.

SECTION 7 - HANDLING AND STORAGE

Precautionary Measures:
Do not leave SODASORB® LF exposed to air for extended periods of time, since this will cause moisture loss and reduce CO2 absorption performance.
Avoid contact with eyes, skin and clothing.
Do not take internally.
Avoid creating airborne dust, especially when pouring or handling loose material.
Keep from freezing, which may reduce CO2 absorption performance and increase fumes.
SODASORB® LF that has been frozen should be completely thawed before use.
Wear gloves and eye protection when handling SODASORB® LF. Wear a dust mask, if necessary.
Keep all SODASORB® LF that has been used with highly flammable anesthetics away from heat, sparks, and open flames, as residual amounts of these materials will be present.
Do not subject SODASORB® LF to high fresh gas flow rates for extended periods of time since this will cause moisture loss from the absorbent. Replace dry SODASORB® LF with fresh absorbent if high fresh gas flow rates have been left on for an extended period of time when the anesthesia machine has not been in use.
Avoid prolonged storage under direct ultraviolet light since this depletes dye contained in Indicator SODASORB® LF.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

EXPOSURE GUIDELINES (US)

Ingredient	ACGIH TLV			OSHA PEL			
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	Substance Specific and Mineral Dust PELs
Calcium hydroxide	5 mg/m3 TWA	-	-	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	-	-	-
Sodium hydroxide	-	-	2 mg/m3 Ceiling	2 mg/m3 TWA	-	-	-

EXPOSURE GUIDELINES (CANADA)

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

Engineering Controls:

Keep all SODASORB® LF that has been used with highly flammable anesthetics away from heat, sparks, and open flames, as residual amounts of these materials will be present.

Personal Protective Equipment:

Respiratory Protection: Wear approved respiratory protection to prevent employee exposure from exceeding the limits specified.
Skin Protection: Rubber or other impervious gloves should be worn to prevent skin contact.
Eye Protection: Safety goggles should be worn to prevent eye contact.
Work/Hygienic Practices: Use good personal hygiene practices.

W. R. GRACE
MATERIAL SAFETY DATA SHEET

Product Name: SODASORB® LF
MSDS ID Number: C-00671

MSDS Date: 06/13/2007

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Appearance/Odor:	White to blue-white odorless granules
Odor Threshold: (ppm)	Not Determined
pH:	Not Applicable
Vapor Pressure: (Mm Hg)	Not Applicable
Vapor Density: (Air = 1)	Not Applicable
Solubility In Water: (%w/w)	Slight
Specific Gravity: (Water = 1)	Not Applicable
Evaporation Rate:	Not Applicable
Boiling Point:	Not Applicable
Freezing Point:	32° F (0°C)
Melting Point:	Not Applicable
Density: (g/ml)	Not Applicable
Volatiles (including water) % by Weight:	≤ 14% as moisture loss
O/W Partition Coefficient:	Not Determined
Volatile Organic Content:(lb/gal less water)	Not Applicable
Volatile Organic Content:(kg/l less water)	Not Applicable

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions To Avoid:	None known for this product.
Hazardous Polymerization:	Will not polymerize.
Hazardous Decomposition Products:	None known for this product. May react with chloroform slightly, producing sodium formate, carbon monoxide and phosgene. May react with trichloroethylene, producing dichloroacetylene, carbon monoxide and phosgene.

SECTION 11 - TOXICOLOGICAL INFORMATION

Ingredient(No data unless listed.)	CAS Number	LD50 and LC50
Calcium hydroxide	001305-62-0	Oral LD50 Rat: 7340 mg/kg
Sodium hydroxide	001310-73-2	Dermal LD50 Rabbit: 1350 mg/kg

SODASORB was determined to be non-corrosive using the InVitro International CORROSITEX test protocol to determine corrosivity.

Carcinogenicity:

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
Calcium hydroxide	No	No	No	No	No	No

Mutagenicity:	Not applicable.
Teratogenicity:	Not applicable.
Reproductive Toxicity:	Not applicable.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate:	No data available for product.
Ecotoxicity:	No data available for product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Procedures:

Unused Sodasorb is not a hazardous waste as defined in the United States 40 Code of Federal Regulations Section 261.3. Disposal of used Sodasorb must be determined by the end user in compliance with federal, state, provincial, and local regulations. Review State Hazardous Waste Regulations, as some states classify this product as a corrosive waste. Specific disposal methods vary with the chemical (e.g., anesthetic agents, acid-based vapors, etc.) or biological agents used with the absorbent by the end user.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name:	Not Applicable
UN/NA Number:	Not Applicable
Domestic Hazard Class:	Nonhazardous
Surface Freight Classification:	Compounds, Gas Absorbing
Label/Placard Required:	Not Applicable

SECTION 15 - REGULATORY INFORMATION

REGULATORY CHEMICAL LISTS:

CERCLA (Comprehensive Response Compensation and Liability Act):

(None present unless listed below)

Chemical Name	CAS #	Wt %	CERCLA RQ
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SARA Title III (Superfund Amendments and Reauthorization Act)

SARA Section 312/Tier I & II Hazard Categories:

Health Immediate (acute)	Yes
Health Delayed (chronic)	No
Flammable	No
Reactive	No
Pressure	No

302 Reportable Ingredients (Identification Threshold 1%):

Chemical Name	CAS #	Wt %	SARA 302 TPQ
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313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

Chemical Name	CAS #	Wt %
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WHMIS Classification(s): D2 B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR). This MSDS contains all the information required by the CPR.

State Regulatory Information:

California Proposition 65: WARNING! This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

Massachusetts Hazardous Substance List(Identification threshold 0.0001%(1ppm)):

Chemical Name	CAS #	Wt %
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New Jersey Hazardous Substance List(Identification threshold (0.1%)):

Chemical Name	CAS #	Wt %
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Pennsylvania Hazardous Substance List(Identification threshold 0.01%):

Chemical Name	CAS #	Wt %
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CHEMICAL INVENTORY STATUS:

All chemicals in this product are listed or exempt from listing in the following countries:

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	Yes	No	Yes	Yes	Not Determined	Not Determined	Not Determined

SECTION 16 – OTHER INFORMATION

Non-Hazardous Ingredient Disclosure:

Chemical Name	CAS Number
Water	007732-18-5
Calcium Chloride	010043-52-4

Prepared by: EH&S Department

Approved by: EH&S Department

Approved Date: 06/13/2007

Disclaimer:

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Safety Data Sheet**
acc. to OSHA HCS

Printing date 02/07/2018

Version: 4.0

Reviewed on 02/07/2018

1 Identification

- **Product identifier**
- **Trade name:** **SODASORB® LF**
- **Application of the substance / the preparation:**
Intermediate product of varied applicability in industry and trade.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Henkel Corporation
One Henkel Way
Rocky Hill
CT 06037
USA
Tel: +1-800-571-5100
Fax: +1-860-571-5465
- **Information department:** sds.darex@henkel.com
- **Emergency telephone number:** Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**

- **GHS label elements**

Classified according to OSHA 2012 HCS 29 CFR 1910.1200 and the Canadian Hazardous Products Act WHMIS 2015.

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
calcium hydroxide

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- **Hazard statements**

Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves / eye protection / face protection.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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/doctor.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 3
Fire = 0
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *3
Fire = 0
Reactivity = 0

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture: consisting of the following components.

- **List of Dangerous Components**

1305-62-0	calcium hydroxide ⚠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335	50-100%
10043-52-4	calcium chloride ⚠ Eye Irrit. 2A, H319	1-3%
1310-73-2	sodium hydroxide ⚠ Met. Corr.1, H290; Skin Corr. 1A, H314	0.1-1%

4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

In case of unconsciousness place patient stably in the recovery position for transportation.

- **After skin contact:** Immediately flush skin with water for at least 15 minutes.

- **After eye contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Then consult a doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information available.
- **Hazardous combustion products** Carbon monoxide and carbon dioxide
- **Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Methods and material for containment and cleaning up:**
Use neutralizing agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Thorough dedusting.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Use only receptacles specifically permitted for this substance/product.
- **Further information about storage conditions:** None.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

1305-62-0 calcium hydroxide

PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL	Long-term value: 5 mg/m ³
TLV	Long-term value: 5 mg/m ³

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Trade name: **SODASORB® LF**

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1310-73-2 sodium hydroxide

PEL	Long-term value: 2 mg/m ³
REL	Ceiling limit value: 2 mg/m ³
TLV	Ceiling limit value: 2 mg/m ³

- **Additional information:** Valid lists at time of creation were used as basis.
- **Exposure controls**
- **Appropriate engineering controls** No further relevant information available.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Avoid contact with the skin.
 Prevent contact with the eyes and skin.
- **Breathing equipment:**
 In case of brief exposure use respiratory filter device. In case of intensive or longer exposure use respirator that is independent of circulating air. As appropriate for the employee exposure, use a NIOSH approved respirator and cartridge.
 As appropriate for the employee exposure, use a NIOSH approved respirator and cartridge.
- **Protection of hands:**



Protective gloves

Check protective gloves prior to each use for their proper condition.
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
 Recommended thickness of the material: ≥ 0.5 mm
- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties• **Information on basic physical and chemical properties**• **General Information**• **Appearance:**

Form:	Pellets
Color:	Whitish

• **Odor:** Characteristic• **pH-value:** Not applicable.

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Trade name: **SODASORB® LF**

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· Change in condition	
· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	Not determined.
· Conditions of flammability	
· Flash point:	Not available.
· Flammability (solid, gaseous):	Not determined.
· Ignition temperature:	Not available.
· Decomposition temperature:	Not available.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Explosion data - sensitivity to mechanical impact	Not determined.
· Explosion data - sensitivity to static discharge	Not determined.
· Vapor pressure at 20°C (68 °F):	23hPa (17.3 mm Hg)
· Density:	Not determined.
· Specific Gravity	Not available
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Insoluble.
· Coefficient of water/oil distribution:	Not available.
· Viscosity:	
· Dynamic:	Not applicable.
· Kinematic:	Not applicable.
· Solvent content:	
· Organic solvents:	0.0%
· Water:	13.6%
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
May react with trichloroethylene, producing dichloroethylene, carbon monoxide and phosgene.
- **Conditions to avoid**
In case of thermal decomposition caused by smouldering and incomplete combustion toxic fumes may be developed.
- **Incompatible materials:** Protect from contamination.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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Trade name: **SODASORB® LF**

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11 Toxicological information

- Information on the likely routes of exposure
- Delayed and immediate effects and chronic effects from short or long term exposure
- Information on toxicological effects
- Acute toxicity:

- LD/LC50 values that are relevant for classification:

1305-62-0 calcium hydroxide

Oral	LD50	>2,000 mg/kg (rat) (OECD 425) ECHA 2011
Dermal	LD50	>2,500 mg/kg (rabbit) (OECD 402) ECHA 2011

10043-52-4 calcium chloride

Oral	LD50	2,120 mg/kg (rat) (OECD 401) ECHA 2011
Dermal	LD50	2,630 mg/kg (rat) IUCLID Dataset (18/Feb/2000) >5,000 mg/kg (rabbit) ECHA 2011

1310-73-2 sodium hydroxide

Dermal	LD50	1,350 mg/kg (rabbit) IUCLID Dataset 18-Feb-2000
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- Primary irritant effect:

- on the skin:

Irritation of skin	IS	>60 (in-vitro) (OECD 425) comp. product GRACE
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1305-62-0 calcium hydroxide

Irritation of skin	IS	(rabbit) (OECD 404) ECHA 2011
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10043-52-4 calcium chloride

Irritation of skin	IS	(rabbit) (OECD 404) ECHA 2011
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1310-73-2 sodium hydroxide

Irritation of skin	IS	5.6 (rabbit) (§ 1500.41 in Federal Register Vol. 38, No. 187) ECHA 2014
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- on the eye:

1305-62-0 calcium hydroxide

Irritation of eyes	IS	(rabbit) (OECD 405) ECHA 2011
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10043-52-4 calcium chloride

Irritation of eyes	IS	(rabbit) (OECD 405) ECHA 2011
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1310-73-2 sodium hydroxide

Irritation of eyes	IS	>2.25 (rabbit) (OECD 405) ECHA 2014
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- Respiratory sensitization No further relevant information available.

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- **Skin sensitization**

1310-73-2 sodium hydroxide

Sensitization	SI	0 (human being) ECHA 2014
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- **Additional toxicological information:**

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

- **Carcinogenicity** No further relevant information available.

- **Mutagenicity**

1310-73-2 sodium hydroxide

AMES Test	mg/plate (Salmonella typhimurium) negative with and without metabolic activation ECHA 2014
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- **Reproductive toxicity** No further relevant information available.

- **Specific target organ toxicity (single exposure)** No further relevant information available.

- **Specific target organ toxicity (repeated exposure)** No further relevant information available.

- **Aspiration hazard** No further relevant information available.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Fish toxicity**

1305-62-0 calcium hydroxide

LC50 (96 h)	160 mg/l (Gambusia affinis) IUCLID Dataset 18-Feb-2000 50.6 mg/l (Oncorhynchus mykiss) ECHA 2011
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10043-52-4 calcium chloride

LC50 (96 h)	10,650 mg/l (Lepomis macrochirus) IUCLID Dataset (18/Feb/2000) 4,630 mg/l (Pimephales promelas) ECHA 2011
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1310-73-2 sodium hydroxide

LC50 (48h)	189 mg/l (Leuciscus idus) IUCLID Dataset (18/Feb/2000)
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- **Water flea toxicity**

1305-62-0 calcium hydroxide

EC50 (48 h)	49.1 mg/l (Daphnia magna) (OECD 202) ECHA 2011
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10043-52-4 calcium chloride

EC50 (24 h)	>3,000 mg/l (Daphnia magna) IUCLID Dataset (18/Feb/2000)
EC50 (21d)	610 mg/l (Daphnia magna) ECHA 2011
NOEC (48 h)	2,000 mg/l (Daphnia magna) (OECD 202) ECHA 2011

1310-73-2 sodium hydroxide

EC50 (48 h)	100 mg/l (Daphnia magna) IUCLID Dataset 18-Feb-2000
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· **Algae toxicity****1305-62-0 calcium hydroxide**

EC10 (72 h)	79.22 mg/l (Pseudokirchneriella subcapitata) (OECD 201) crangon septemspinosa
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10043-52-4 calcium chloride

EC50 (72 h)	2,900 mg/l (Selenastrum capricornutum) (OECD 201) ECHA 2011
LOEC (120d)	140 mg/l (Chlorella vulgaris) IUCLID Dataset (18/Feb/2000)

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Disposal methods** Comply with Federal, State, and local regulations.
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

14 Transport information

- | | |
|------------------------------------|-----------------|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Not applicable. |
| · UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | Not applicable. |

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· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Not applicable.
· Packing group	
· DOT, ADR, IMDG, IATA	Not applicable.
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: -
· ADR	
· Remarks:	Contains <4% Sodium Hydroxide, see Special Provision 62
· IMDG	
· Remarks:	Contains <4% Sodium Hydroxide, see Special Provision 62
· IATA	
· Remarks:	Contains <4% Sodium Hydroxide, see Special Provision A16

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **SARA**

· SARA 302/304

None of the ingredients is listed.

· SARA 313

None of the ingredients is listed.

· SARA 311/312

Health Hazard - Skin corrosion or irritation

Health Hazard - Serious eye damage or irritation

Health Hazard - Specific target organ toxicity (single or repeated exposure)

· TSCA (Toxic Substances Control Act):

Inventory listing could not be confirmed for one or more substances.

· Proposition 65
· Chemicals known to cause cancer:

50-00-0 | formaldehyde

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

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USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/07/2018

Version: 4.0

Reviewed on 02/07/2018

Trade name: **SODASORB® LF**

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<ul style="list-style-type: none"> • Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

<ul style="list-style-type: none"> • Carcinogenic categories
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<ul style="list-style-type: none"> • EPA (Environmental Protection Agency)
--

None of the ingredients is listed.

<ul style="list-style-type: none"> • NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

<ul style="list-style-type: none"> • Canadian DSL

All ingredients are listed.

<ul style="list-style-type: none"> • Canadian NDSL
--

All substances are listed or exempt from listing.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

- **Department issuing SDS:** Product Safety and Regulatory Affairs Group

- **Other information:**

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

- **Date of preparation / last revision** 02/07/2018 / 3.9

- **The first date of preparation** 02/28/2017

- **Number of revision times and the latest revision date** 4.0 / 02/07/2018

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Met. Corr.1: Corrosive to metals – Category 1

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

—USA—