Product name:

SODASORB® LF

Revised edition no: 797 - Rev C



1	PRODUCT AND COMPANY IDENTIFICATION				
1.1	Product Name	SODASORB® LF			
1.2	CAS Number	Mixture			
1.3	Product Use	Absorbent. Intermediate product of varied applicability in industry and trade.			
1.4	Supplier / Manufacturer	Molecular Products, Inc (a subsidiary of Molecular Products Group) 633 CTC Boulevard, Louisville CO, 80027, USA			
1.5	Emergency Contact	+1 202 464 2554 US and Canada			
1.6	Date of Initial Preparation	08 Jan 2020			
1.7	Date of Previous Revision	08 Jan 2020			

2	HAZARDS II	HAZARDS IDENTIFICATION							
2.1	Classification o	Classification of the substance or mixture (i.e. Sodasorb)							
2.1.1		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).							
	Skin Irrit. 2	H315	Eye Dam. I	H318		STOT SE 3	H335		
2.1.2	See section 16	for full text of H Statements							
2.2	Labelling eleme	ents							
2.2.1	Labelling in acc	Labelling in accordance with EC Regulation No 1272/2008 (CLP/GHS)							
	Pictograms				Signal Word		DANGER		
	Hazard Statem	ents			•		•		
	H314		Causes severe ski	n burns and eye da	mage				
	Precautionary	Statements							
	P260		Do not breathe d	ust/fume/gas/mist/v	apors/spray				
	P264		Wash thoroughly	after handling					
	P280		Wear protective a	gloves/protective cl	othing/eye p	protection/face prot	ection		
	P303/361/353		IF ON SKIN (or h	nair): Take off imme	ediately all co	ontaminated clothing	g. Rinse skin with water/shower.		
	P305/P351/P33	88	IF IN EYES: Rinse easy to do. Conti		ter for seve	ral minutes, Remove	contact lenses, if present and		
	P310	P310 Immediately call a POISON CENTER or doctor.							
2.3	Other Hazards	3							
	None known								

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3	COMPOSITION AND INFORMATION ON INGREDIENTS						
3.1	Chemical characterization	Solid bases plus additives — see section 16 The CLP classifications required in this section are related to that of the product supplied. To comply with the legislation the classification of the relevant ingredients of the product, as if they were present at 100%, must be outlined. Where ingredients are present in the product at very low concentrations, the level of risk to the user is reduced; hence the reason that the classifications for the individual components and the product are different					
	Chemical name	Concentration	CAS No	Classification			
	calcium hydroxide	50-100%	1305-62-0	Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335			
	calcium chloride	I-3%	1-3% 10043-52-4 Eye Irrit. 2A, H319				
	sodium hydroxide	0.1-1%	1310-73-2	Met. Corr.1, H290; Skin Corr. 1A, H314			

4	FIRST-AID MEASURES				
4.1	Description of measures				
	Inhalation	In case of unconsciousness place patient stably in the recovery position for transportation			
	Skin contact	Immediately flush skin with water for at least 15 minutes.			
	Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Then consult a doctor			
4.2	Most important effects/symptoms	None known			
4.3	Immediate/special treatment	Treatment as described above			

5	FIRE-FIGHTING MEASURES	
5.1	Extinguishing media	Use fire-fighting measures that suit the environment Carbon monoxide and carbon dioxide
5.2	Special hazards	None known
5.3	Advice for firefighters	Do not inhale explosion gases or combustion gases Dispose of fire debris and contaminated fire-fighting water in accordance with official regulations

6	ACCIDENTAL RELEASE MEASURES					
6.1	Personal precautions	Wear protective equipment. Keep unprotected persons away				
6.2	Methods and materials for clean up	Use neutralizing agent. Dispose contaminated material as waste according to section 13. Ensure adequate ventilation				
6.3	Environmental precautions	Do not allow to get into waterways or waste water. If this occurs, inform the relevant water authorities at once				
6.4	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	
7.1	Precautions for safe handling	Thorough dedusting. Avoid raising and deposition of dust. Handle in accordance with good hygiene practices.
7.2	Information about protection against explosions and fires	No special measures required.
7.3	Conditions for safe storage, including any incompatibilities	Use only receptacles specifically permitted for this substance/product. Store away from foodstuffs. Protect from frost. Store in dry conditions.

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8	EXPOSURE CONTROLS / PERSONAL PROTECTION								
8.1	Exposure limits/guidelines								
	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.						
	Chemical Name	CAS#	CAS # ACGIH TLV OSHA PEL						
	Calcium hydroxide	1305-62-0	I 305-62-0 Long-term value: 5 mg/m³ PEL: Long-term value: 15* 5** mg/m³ *total dust **respirable fraction REL: Long-term value: 5 mg/m³						
	Sodium hydroxide	1310-73-2	1310-73-2 Ceiling limit value: 2 mg/m³ PEL: Long-term value: 2 mg/m³ REL: Ceiling limit value: 2 mg/m³						
8.2	Exposure controls								
	Engineering controls	No further relevant information available. 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.							
	Personal Protection								
	Respiratory protection	respirator that is indepen- NIOSH approved respirat As appropriate for the em	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.						
	Skin protection	Protective gloves: Check protective gloves prior to each use for their proper condition. The glove material must 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 cannot 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								
	Appearance- Form	Pellets	Appearance- Color	Whitish					
	Odor Characteristic		pH-value	Not applicable					
	Melting point / Melting range	Not determined	Boiling point / Boiling range	Not determined					
	Flash Point	Not available	Flammability (solid, gaseous)	Not determined					
	Decomposition Temperature	Not determined	Igniting	Product is not self-igniting					
	Danger of explosion	Product does not present an explosion hazard	Upper/Lower Explosion limits	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					
	Viscosity- Kinematic	Not applicable	Organic solvents	0.0%					
	Water	13.6%	Other information	No further relevant information available					

10	STABILITY AND REACTIVITY	
10.1	Reactivity	No further relevant information available

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10	STABILITY AND REACTIVITY	
10.2	Chemical stability	No decomposition if used according to specifications
10.3	Hazardous reactions	May react with trichloroethylene, producing dichloracetylene, carbon monoxide and phosgene
10.4	Conditions to avoid	In case of thermal decomposition caused by smouldering and incomplete combustion toxic fumes may be developed
10.5	Incompatible materials	Protect from contamination
10.6	Hazardous decomposition products	No dangerous decomposition products known

- 11	TOXICOLOGICA	AL INFORMATION								
11.1		ikely routes of exposu iate effects and chronic cological effects		or long-tern	n exposu	ıre				
	Acute toxicity									
	1305-62-0	calcium hydroxide	Oral	LD50	>2,000	mg/kg (rat) (OEC	D 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	2,630 mg/kg (rat)				Dataset o/2000)
			Dermal	LD50	>5,000	mg/kg (rabbit)			ECHA	2011
	1310-73-2	sodium hydroxide	Dermal	LD50	1,350	mg/kg (rabbit)			IUCLIE 18-Feb	Dataset -2000
	Primary irritant effect	ct- on the skin	Irritation of skin	IS	>60 (ir 425)	n-vitro) (OECD	comp. prod	duct	GRAC	E
	1305-62-0	calcium hydroxide	Irritation of skin	IS	(rabbit) (OECD 404)			ECHA	2011
	10043-52-4	calcium chloride	Irritation of skin	IS	(rabbit	(OECD 404)			ECHA	2011
	1310-73-2	sodium hydroxide	Irritation of skin	IS	5.6 (ra 38, No	/ (3	Federal Register Vol.		ECHA	2014
	Primary irritant effect	ct- on the eye								
	1305-62-0	calcium hydroxide	Irritation of eyes	IS	(rabbit	(OECD 405)			ECHA	2011
	10043-52-4	calcium chloride	Irritation of eyes	IS	(rabbit) (OECD 405)			ECHA 2011	
	1310-73-2	sodium hydroxide	Irritation of eyes	IS	>2.25	(rabbit) (OECD 40	5)		ECHA 2014	
	Respiratory sensitiza	ntion	No further relevant information available.							
	Skin sensitization									
	1310-73-2	sodium hydroxide	Sensitization	SI	0 (hun	nan being)			ECHA	2014
	Additional toxicolog	ical information								
	Carcinogenic catego	ries	IARC (International Agency for Research on Cancer)					None o	of the ents 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 (carcino	ogenity, mutagenicity a	nd toxicity for repr	oduction)						
	Carcinogenicity		No further releva	ant informatio	on availal	ole.				
	Mutagenicity									
	1310-73-2	sodium hydroxide	de AMES Test mg/plate (Salmonella typhimurium) negative with and without metabolic activation						ECHA 2014	
	Reproductive toxicit	ty .	No further releva	No further relevant Specific target organ toxicity No furt			No further			
	Specific target organ exposure)	toxicity (repeated	No further relevation availation information availation	ant	,	(single exposure) information Aspiration hazard No furthe				t

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12	ECOLOGICAL INFORMATION								
12.1	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		
	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		
	1310-73-2	sodium hydroxide	LC50 (48h)	189 mg/l (Leuciscus idus)	IUCLID Dataset (18/Feb/2000)				
	Water flea to	xicity							
	1305-62-0	calcium hydroxide	EC50 (48 h)	49.1 mg/l (Daphnia magna) (OECD 202)			ECHA 2011		
	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				
	Algae toxicity								
	1305-62-0	calcium hydroxide	EC10 (72 h)	79.22 mg/l (Pseudokirchneriella subcapitata) (OECD 201)	crangon septemspinosa				
	10043-52-4	calcium chloride	EC50 (72 h)	2,900 mg/l (Selenastrum capricor (OECD 201)	rnutum)		ECHA 2011		
			LOEC (120d)	140 mg/l (Chlorella vulgaris)	IUCLID Dataset (18/Feb/2000)				
12.2									
12.2	Bioaccumulative potential No further relevant information available								
12.3	Mobility in so	il	No further rele	vant information available.					
12.4	General note	s		ndiluted product or large quantities of reach bodies of water or drainag			ewage		
	PBT / vPvB A	ssessment	Not applicable	,					

13 DISPOSAL CONSIDERATIONS			
	Advice on disposal		Comply with Federal, State, and local regulations.
	Contaminated packaging		Treat empty containers in the same way as product. Must not be disposed of together with garbage. Do not allow product to reach sewage system.

14	TRANSPORTATION INFORMA	ATION			
14.1	United Nations number (DOT, ADR, ADN, IMDG, IATA) Not applicable		14.2	UN proper shipping name (DOT, ADR, ADN, IMDG, IATA)	Not applicable
14.3	Transport hazard class(es) (DOT, ADR, ADN, IMDG, IATA) Class Not applicable		14.4	Packing group (DOT, ADR, IMDG, IATA)	Not applicable
14.5	Environmental hazards	Not applicable	14.6	Special precautions for user	Not applicable.
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable	14.8	Transport/Additional information (DOT) Quantity limitations	Not applicable On passenger aircraft/rail: -
14.9	ADR Remarks:	Contains <4% Sodium Hydroxide, see Special Provision 62	14.10	IMDG Remarks:	Contains <4% Sodium Hydroxide, see Special Provision 62
14.11	IATA Remarks:	Contains <4% Sodium Hydroxide, see Special Provision A16			

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15	REGULATORY INFORMATION					
15.1	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 dam	nage 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.				
15.2	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.				
	Chemicals known to cause developmental toxicity:	None of the ingredients is listed.				
15.3	Carcinogenic categories:					
	EPA (Environmental Protection Agency)	None of the ingredients is listed.				
	NIOSH-Ca (National Institute for Occupational Safety and Health)	None of the ingredients is listed.				
15.4	Canadian Regulations					
	Canadian DSL:	All ingredients are listed.	Canadian NDSL:	All substances are listed or exempt from listing.		

16	OTHER INFORMATION							
		his information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall ot establish a legally valid contractual relationship.						
16.1	Relevant phrase	s						
	H314	Causes	severe skin burns and eye damage	P260	Do not breathe dust/fume/gas/mist/vapors/spray			
	P264	Wash tl	noroughly after handling	P280	Wear protective gloves/protective clothing/eye protection/face protection			
	P303/361/353		KIN (or hair): Take off immediately all nated clothing. Rinse skin with nower.	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	Immedia	ately call a POISON CENTER or doctor.					
16.2	Department issuing SDS		Product Safety and Regulatory Affairs Group					
16.3	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.					

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16.4	Abbreviations and acronyms					
	ADR	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)				
	HMIS	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. I	Corrosive to metals – Category I				
	Skin Corr. IA	Skin corrosion/irritation – Category IA				
	Skin Irrit. 2	Skin corrosion/irritation – Category 2				
	Eye Dam. I	Serious eye damage/eye irritation – Category I				
	Eye Irrit. 2A	Serious eye damage/eye irritation – Category 2A				
	STOT SE 3	Specific target organ toxicity (single exposure) – Category 3				
	Prepared By	Angie Hellstern				
	Disclaimer: The information in this safety data sheet is based on the best knowledge available at the time and current 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 in compliance with the relevant requirements of legislation.					
	Date of issue					