## SAFETY DATA SHEET



Safety Data Ref: 561 Initial issue date: 09 September 2014 Revision date: N/A Version number: 1



	IDENTIFICATION	I OF SUBS	STANCE / PF	N OF SUBSTANCE / PREPARATION AND OF THE COMPANY					
1.1	Product Identifier - Soda Lime (EcoSorb)								
	Company Prod								
	561-2550, 561-2	2551, 561	1						
1.2	Relevant		As an ab	As an absorbent of carbon dioxide and other acidic gases.					
	use(s)/misuse(s	)							
1.3	SDS supplier			Medical Sales & Servic	es, LLC., 2601	Holloway Ro	oad Louisvil	le, KY 40299	
1.4	Emergency Co	ontact	1(502)671-1014						
2	HAZARDS IDEN	TIFICATIO	N						
2.1	Classification o	of the sub	stance or r	nixture (i.e. EcoSorb)		w			
2.1.1	Classification a	iccording	g to Regula	tions (EC) No 1272/200	8 2.1.2	Classifica	tion accord	ding to EC - see section	
	(CLP/GHS) - see	e section	11						
	Skin irrit. 2			H315		Xi		R36/38	
	Eye irrit. 2			H319					
2.1.3			e with EC D	Directives 67/548/EEC a	nd 1999/45/E	EC (CHIP 4)			
2.2	Labelling elements								
2.2.1	Physicochemical			According to experience, the product is considered to have no adverse					
				physicochemical properties if handled in the correct manner					
	Health			Irritating to eyes and skin					
	Environmental							have no adverse affec	
2.2.2		cordance	e with EC R	According to expe on the environmer legulation No. 1272/200	nt if handled	in the correc		have no adverse affec	
2.2.2		cordance	e with EC R	on the environmer	nt if handled	in the correc		have no adverse affec	
2.2.2	Labelling in act		e with EC R	on the environmer	nt if handled 08 (CLP/GHS)	in the correc			
2.2.2	Labelling in acc	ents	e with EC R	on the environmer regulation No. 1272/200	nt if handled 08 (CLP/GHS)	in the correc			
2.2.2	Labelling in acc Pictogram Hazard statem	ents Cause		on the environmer regulation No. 1272/200	nt if handled 08 (CLP/GHS)	in the correc			
2.2.2	Labelling in acc Pictogram Hazard statem H315	ents Cause Cause	s skin irritati s serious ey	on the environmer regulation No. 1272/200	nt if handled 08 (CLP/GHS)	in the correc			
2.2.2	Labelling in acc Pictogram Hazard statem H315 H319	ents Cause Cause statemer	s skin irritati s serious ey hts	on the environmer regulation No. 1272/200	nt if handled D8 (CLP/GHS) Signal w	in the correc ) vord	et manner		
2.2.2	Labelling in acc Pictogram Hazard statem H315 H319 Precautionary s	ents Cause Cause statemer Wear p	s skin irritati s serious ey nts protective s	on the environmer egulation No. 1272/200 Ton re irritation	nt if handled D8 (CLP/GHS) Signal w	in the correc ) vord	et manner		
2.2.2	Labelling in acc Pictogram Hazard stateme H315 H319 Precautionary s P280	ents Cause Cause statemer Wear p Get m	s skin irritati s serious ey nts protective s edical adv	on the environmer regulation No. 1272/200 on re irritation glove/protective clothi	nt if handled D8 (CLP/GHS) Signal w ing/eye prote	in the correc ) vord	et manner		
2.2.2	Labelling in acc Pictogram Hazard stateme H315 H319 Precautionary s P280 P314	ents Cause Cause statemer Wear p Get m If on sk	s skin irritati s serious ey nts protective s edical adv in: wash wi	on the environmer egulation No. 1272/200 on re irritation glove/protective clothi ice/attention if you fee	nt if handled D8 (CLP/GHS) Signal w Signal w ing/eye prote of unwell water	in the correc vord	et manner		
2.2.2	Labelling in act Pictogram Hazard stateme H315 H319 Precautionary s P280 P314 P302/352	ents Cause Cause statemer Wear p Get m If on sk If in ey	s skin irritati s serious ey nts protective g edical adv in: wash wi es: rinse ca	on the environmer regulation No. 1272/200 The irritation glove/protective clothing ice/attention if you feet ith plenty of soap and	nt if handled D8 (CLP/GHS) Signal w Signal w ing/eye prote el unwell water several minu	in the correction/face	protection		
2.2.2	Labelling in act Pictogram Hazard stateme H315 H319 Precautionary s P280 P314 P302/352	ents Cause Cause statemer Wear p Get m If on sk If in ey Remov	s skin irritati s serious ey nts protective g edical adv in: wash wi es: rinse ca ve contact	on the environmer regulation No. 1272/200 on re irritation glove/protective clothinice/attention if you fee ith plenty of soap and iutiously with water for	nt if handled D8 (CLP/GHS) Signal w Signal w el unwell water several minute easy to do. C	in the correction/face	protection		

3	COMPOSITION / INFORMATION ON INGREDIENTS						
		Solid bases plus a	Solid bases plus additives - see section 16				
		The CHIP/CLP cla	ssifications required ir	n this section are related	d to that of the		
		product supplied.	To comply with the	legislation, the classific	ation of the		
	Chemical characterization	relevant ingredier	nts of the product, as	if they were present at	100%, must be		
		outlined. Where i	ngredients are prese	nt in the product at ver	y low		
		concentrations, th	concentrations, the level of risk to the user is reduced, hence the reason that				
		the classifications	for the individual co	mponents and the proc	duct are different		
	Chemical name	CAS-No	EINECS/ELINCS	Classification	Concentration		
	Sodium Hydroxide	1310-73-2	215-185-5	CHIP:C:R35			
				CLP: Skin Corr. IA	<3%		
			-	H314			
	Calcium Hydroxide	1305-62-0	215-137-3	CHIP:Xi:R38.41			
				CLP: Skin Irrit. 2 H315	<75%		
			Eye Damage I H318				
				WEL assigned			

4	FIRST AID MEASURES				
4.1	Description of measures				
	Inhalation	Remove casualty to fresh air and provide warmth and rest			
	Skin contact	Clean areas of skin affected immediately with soap and plenty of water. If			
		necessary, seek medical advice			
	Eye contact	Immediately wash out eyes thoroughly with plenty of water until irritation			
		subsides. Consult an eye specialist/ophthalmologist			
	Ingestion	Unlikely route of exposure, but if product is swallowed, do not induce vomiting.			
		Drink plenty of water and if necessary, seek medical advice			
4.2	Most important	None known			
	effects/symptoms				
4.3	Immediate/ special treatment	Treatment as described above			

5	FIRE FIGHTING MEASURE	
5.1	Extinguishing media	To suit local surroundings, (e.g. chemical powder, carbon dioxide, dry sand, water)
5.2	Special hazards	None known (Material is non-combustible, packaging maybe combustible)
5.3	Advice for fire fighters	Self-contained breathing apparatus may be required

6	ACCIDENTAL RELEASE MEASURES				
6.1	Personal precautions	Adhere to personal protective measures (Avoid inhaling dust/ avoid skin &			
		eye contact			
6.2	Environmental precautions	No known hazard. Avoid release into waste water.			
6.3	Methods & materials for	In the event of spillage, take up mechanically (sweep or vacuum) into tightly			
	cleaning up	closed containers. Adhere to personal protective measures. Flush any remainder			
		with plenty of water and vacuum into a labeled container and dispose of			
		as prescribed			
6.4	Reference to other sections	See section 8 for personal protective equipment			

7	HANDLING AND STORAGE	
7.1	Precautions for safe handling	Handle in accordance with good hygiene and safety practice. Avoid the raising
		and deposition of dust
7.2	Conditions for safe storage	Ensure adequate ventilation of the storage area. Keep containers tightly closed,
		cool (32-95°F (0-35°C)) and dry, avoiding direct sunlight
7.3	Specific end use(s)	As an absorbing agent
7.4	Restrictions on use	EcoSorb is a CO $_2$ absorbent intended for use with anesthesia systems. EcoSorb
		should only be used in the pressence of air, oxygen, isoflurane and sevoflurane.

8	EXPOSURE CONTROLS / PERSONAL PROTECTION						
8.1	Workplace Exposure Limits (WELs)	have been	assigned	by the HSE (EH40/200	05)		
	STEL (15 mins)	ppm	2	mg/m <sup>3</sup>	Data for sodium hydroxide		
	LTEL (8 hour TWA)	ppm	5	mg/m <sup>3</sup>	Data for calcium hydroxide		
8.2	Exposure controls						
	Engineering controls	Provide a	dequate	ventilation (e.g. loco	al exhaust ventilation)		
		Observe	normal st	andards for handling	chemicals		
	Personal protection Wash Hands before breaks and after work						
		Avoid inh	alation o	f dust if raised			
		Wear per	sonal pro	tective equipment c	appropriate to the task (see below)		
	Eye protection	Safety go	ggles if ri	sk of eye contamina	tion		
	Skin protection	Suitable g	gloves (co	onsider your won risk	assessment e.g. breakthrough times, rates		
		of diffusio	n and de	gradation, tasks und	dertaken)		
	Respiratory protection	Approved	Approved dust mask or respirator (e.g. EN 149-2001 FFP3) for dust if ventilation is				
		insufficier	insufficient				
	Other protection	Protective	e overalls				

9	PHYSICAL AND CHEMICAL PROPERTIES					
9.1	Basic physical and chemical prope	erties				
	Physical form Solid Color White or colored					
	Odor	Odorless	рН	12-14		
	Boiling pt/range	Not determined	Melting pt/range	Not determined		
	Flash point	Not applicable	Relative density	~0.9g/cm <sup>3</sup> to approx 2.0 g/cm <sup>3</sup>		
	Water Solubility	Slight				
9.2	Other information	None				

10	STABILITY AND REACTIVITY			
10.1	Reactivity	Heat is generated if exposed to acids		
10.2	Chemical stability	Stable under normal conditions of handling		
10.3	Hazardous reactions	Hazardous polymerisation will not occur		
10.4	Conditions to avoid	Contact with air - formation of calcium and sodium carbonate		
10.5	Incompatible material	Chloroform, trichloroethylene		
10.6	Hazardous decomposition products	None		

11	TOXICOLOGICAL INFORMATION					
11.1	Information on toxicological effects					
	Acute toxicity	ity LD (Io) rabbit (oral) 500 mg/kg Data for sodium hydroxide				
		LD <sub>50</sub> rat (oral) >.7000 mg/kg Data for calcium hydroxide				
	Dermal compatibility	No data available				
	Mucus membrane	No data available				
		Although using the 'conventional method' under CHIP or 'specific concentration'				
	Further information	limits under CLP, the product classification would be 'corrosive' using EU official				
		in vitro tests on the whole product, it was found to be irritating to eyes and skin,				
		not corrosive				

12	ECOLOGICAL INFORMATION					
12.1	Toxicity	LC <sub>50</sub>	.C <sub>50</sub> Aquatic organisms mg/l No data available			
12.2	Degradability	Not determined	Not determined 12.3 Bioaccumulative potential Not determined			
12.4	Mobility in soil	Not determined	Not determined 12.5 PBT/vPvB assessment Not applicable			
12.6	Other adverse effects	None known - conve	Ione known - converts to naturally occurring minerals			

13	DISPOSAL CONSIDERATIONS				
	Advice on disposal	Advice on disposal If possible, recycle to supplier or approved recycling company. If not (e.g. designated as			
		waste), dispose of in accordance with national and local authority regulations, e.g.			
		Incinerator; Do not discard with household garbage. Avoid allowing product to reach			
		sewage system			
	Contaminated	Treat empty containers in the same way as the product.			
	packaging				

14	TRANSPORT INFORMATION				
14.1	United Nations number	Not classified	14.2	Proper shipping name	Not classified
	(ADR, IMDG, IATA)			(ADR, IMDG, IATA)	
14.3	Transport class(s)	Not classified	14.4	Packing group	Not classified
	(ADR, IMDG, IATA)			(ADR, IMDG, IATA)	
14.5	Environmental hazards	The product should	14.6	Special procedures	Not applicable
		not be marked as		(ADR, IMDG, IATA)	
		a marine pollutant			
14.7	Transport in bulk	Not applicable			

15	REGULATORY INFORMATION		
15.1	Safety, health and	The product is classified in accordance with the Chemicals (Hazard Information and	
	environmental regulations	Packaging for Supply) Regulations (CHIP 4) and EC Regulation 1272/2008 (CLP). Other	
		regulatory information and provisions are not applicable for this product	
15.2	Chemical safety assessment	Not applicable	

16	OTHER INFORMATION		
	Further information	The SDS has been revised in accordance with EC Regulation 1272/2008 (CLP)	
		Comply with COSHH Regulations	
	Sources of data	Other suppliers' safety data sheets, Annex VI of the CPL Regulations (EC) No 1272/2008,	
		EH40 (2005) OECD 431, 2004 Testing of chemicals, in vitro skin corrosion, human skin test	
		model	
	Date of issue	9/16/2014	
	This information is based on our present state of knowledge and is intended to describe our products from the point		
	of view of the safety requirements. It should not be construed as guaranteeing specific problems		