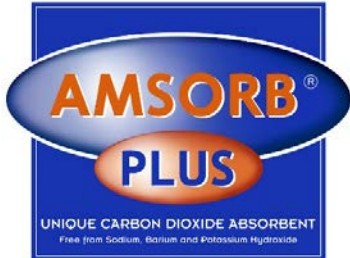


SAFETY DATA SHEET

Product name: AMSORB® PLUS	Initial issue date: October 2004 Version 09 of 23/11/2017 Previous Version was 08 of 10/05/2016	
		

1	IDENTIFICATION OF PRODUCT/COMPANY	
1.1	Product identifier	AMSORB® Plus
1.2	Relevant use(s)/misuse(s)	Carbon dioxide absorbent for medical use only; suitable for use in anaesthetic breathing equipment.
1.3	SDS supplier	Armstrong Medical Limited Wattstown Business Park, Newbridge Road, Coleraine Northern Ireland BT52 1BS
1.4	Emergency contact	Tel: 00 44 (0) 28 70 356029 Fax: 00 44 (0) 28 70 356875 e-mail: info@armstrongmedical.net

2	HAZARDS IDENTIFICATION			
2.1	Classification of the substance or mixture			
2.1.1	Classification according to Regulation (EC) No 1272/2008 (CLP/GHS)			
	Causes skin irritation		H315	
	Causes serious eye irritation		H319	
	May cause respiratory irritation		H335	
2.2	Labelling elements			
	Labelling in accordance with EC Regulation No 1272/2008 (CLP/GHS)			
	Pictogram		Signal word	Warning
	Hazard statements			
	H315	Causes skin irritation.		
	H319	Causes serious eye irritation.		
	H335	May cause respiratory irritation.		
	Precautionary statements			
	P280	Wear protective gloves/protective clothing/eye protection/face protection.		
	P314	Get medical advice/attention if you feel unwell.		
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.		
	P302/352	If on skin: wash with plenty of soap and water.		
	P305/351/338	If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do. Continue rinsing.		
	P332/313	If skin irritation occurs: get medical advice/attention.		
	P304/340	If inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing.		
2.3	Other hazards			
	None known			

3	COMPOSITION/INFORMATION ON INGREDIENTS				
	Mixture Characterisation	Solid base plus additives 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.			
3.2	Chemical name	CAS-No	EINECS/ELINCS	Classification	Concentration
	Calcium Hydroxide	1305-62-0	215-137-3	CLP: Skin irritation (Category 2) H315 Eye irritation (Category 1) H318 WEL assigned	>80%
	Calcium Sulphate	7778-18-9	231-900-3	No classification	<1.5
	Calcium Chloride	7440-70-2	233-140-8	Eye irritation (Category 2) H319	<3.5

4 FIRST AID MEASURES		
4.1	Description of measures	
	Inhalation	Remove casualty to fresh air and provide warmth and rest. If upper respiratory tract is inflamed, seek medical advice.
	Skin contact	Clean areas of skin affected immediately with soap and plenty of water. If necessary, seek medical advice.
	Eye contact	Immediately wash out eye thoroughly with plenty of water until irritation subsides; seek medical advice.
	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 effects/symptoms	Most acute symptom is eye irritation. No known delayed effects.
4.3	Immediate/special treatment	Treatment as described above.

5 FIREFIGHTING MEASURES		
5.1	Extinguishing media	Water, Foam, CO2 and Powder are all suitable fire extinguishers.
5.2	Special hazards	Material is non-combustible. Packaging may be 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 high concentrations of dust and avoid skin and eye contact.
6.2	Environmental precautions	None known.
6.3	Methods and materials for cleaning up	In the event of spillage, take up mechanically (e.g. sweep or vacuum up) into tightly closed containers. Adhere to personal protective measures. Flush any remainder with plenty of water. Label container and dispose of as per normal procedures.
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	Store in a clean, dry environment with adequate ventilation. Store sealed containers at ambient conditions, avoiding direct sunlight.
7.3	Specific end use(s)	As an absorbing agent

8	EXPOSURE CONTROL/PERSONAL PROTECTION			
8.1	Workplace Exposure Limits (WELs) have been assigned by the HSE (EH40/2005)			
	STEL (15 mins)	4	mg/m³	Data for calcium hydroxide
	LTEL (8 hour TWA)	1	mg/m³	
8.2	Exposure controls			
	Engineering controls	N/A		
	Personal protection	Observe normal standards for handling chemicals. Wash hands before breaks and after work. Avoid inhalation of dust if raised. Wear personal protective equipment appropriate to the task (see below).		
	Eye protection	Safety goggles to minimise risk of eye contamination		
	Skin protection	Suitable gloves; wash thoroughly if skin contact occurs.		
	Respiratory protection	Approved dust mask or respirator for dust (if ventilation is insufficient).		
	Other protection	N/A		

9 PHYSICAL AND CHEMICAL PROPERTIES				
9.1	Basic physical and chemical properties			
	Physical form	Solid white (purple when expired) granules	Colour	White or coloured
	Odour	Odourless	pH	~12.5
	Boiling pt./range	Not determined	Melting pt./range	Not determined
	Water solubility	Slight	Relative density	~ 2
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 carbonate
10.5	Incompatible material	Chloroform, trichloroethylene
10.6	Hazardous decomposition products	None

11	TOXICOLOGICAL INFORMATION			
11.1	Information on toxicological effects			
	Acute Toxicity	LD50 rat (oral)	> 2000 mg/kg (OECD 425)	Data for calcium hydroxide
	Dermal compatibility		Severe to moist skin tissue, eyes and exposed cuts	
	Mucous membrane		Irritant also to respiratory system and nasal passage.	
	Further information		Repeated or prolonged contact of the skin can cause redness, desquamation and fissures. Prolonged inhalation of dust may cause respiratory disease due to trace amounts of crystalline silica. Calcium hydroxide is not listed on the MSHA, OSHA or IARC lists of carcinogens.	

12	ECOLOGICAL INFORMATION				
12.1	Toxicity	LC50	Aquatic organisms	NOEC (14d) for marine water invertebrates: 32 mg/l	
12.2	Degradability	Not relevant for inorganic substance	12.3	Bioaccumulative potential	Not relevant for inorganic substance
12.4	Mobility in soil	Low mobility due to low solubility	12.5	PBT/vPvB assessment	Not relevant for inorganic substance
12.6	Other adverse effects		None known – converts to naturally occurring minerals		

13	DISPOSAL CONSIDERATIONS	
13.1	Dispose of in accordance with national and local authority regulations. Disposal by licensed contractor and carrier. Should be disposed of as non-contaminated clinical waste. The used packing is only meant for packing this product; it should not be reused for other purposes.	

14	TRANSPORT INFORMATION				
14.1	United Nations number (ADR, IMDG, IATA)	Not regulated	14.2	Proper shipping name (ADR, IMDG, IATA)	Not regulated
14.3	Transport class(s) (ADR, IMDG, IATA)	Not regulated	14.4	Packing group (ADR, IMDG, IATA)	Not regulated
14.5	Environmental hazards (ADR, IMDG, IATA)	None	14.6	Special procedures (ADR, IMDG, IATA)	Not regulated
14.7	Transport in bulk	Not applicable			

15	REGULATORY INFORMATION	
15.1	Safety, health and environmental regulations	The product is classified in accordance with EC Regulation 1272/2008 (CLP). Other regulatory information and provisions are not applicable for this product.
15.2	Chemical safety assessment	A chemical safety assessment has not been performed for this substance.

16	OTHER INFORMATION/REVISION HISTORY	
16.1	Further information	The SDS has been revised in accordance with EC Regulation 1272/2008 (CLP) Comply with COSHH Regulations
16.2	Sources of data	Other suppliers' safety data sheets, Annex VI of the CPL Regulation (EC) No 1272/2008, EH40 (2005)
16.3	Date of issue	23/11/2017
16.4	Shelf life	5 years for Jerican, bags and canister products and 3 years for cartridges (providing the product is stored appropriately).
16.5	Disclaimer	This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation (EC 1907/2006; article 31 and Annex II) and on guidance from ECHA Regulation (ECHA-13-G-11-EN, version 2.1, February 2014), relevant to the compilation of safety data sheets. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions. This information is based on our present state of knowledge and is intended to describe our product from the point of view of the safety requirements.