

Safety Data Sheet



Product name:

Chemsorb[®] 16103


Safety Data Ref: 43

Initial issue date: 30 March 2015

Revision date:

Version number: 1

1 IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF THE COMPANY	
1.1	Product identifier Chemsorb 16103
1.2	Relevant use(s)/misuse(s) As a gas adsorbent(e.g. breathing air respirators)
1.3	SDS supplier Molecular Products Ltd, Parkway, Harlow Business Park, Harlow, Essex, CM19 5FR, UK
1.4	Emergency contact +44 (0)1279 445111 (office hours) / +44 (0)1865 407333 (24 hour emergency number, English speaking) trevor@rising-hsande.co.uk (competent person email)
	Emergency contact (other) China +86 512 8090 3042, China (NRCC): +86 532 8388 9090, Mexico: +52 555 004 8763, Chile: +56 225 829 336, Brazil: +55 11 3197 5891

2 HAZARDS IDENTIFICATION	
2.1 Classification of the substance or mixture	
2.1.1	Classification according to Regulation (EC) No 1272/2008 (CLP/GHS)
	Carc. 2 H351
2.1.2	Classification according to EC 67/548/EEC and 1999/45/EC
	Xn R40
2.1.3	See section 16 for full text of H and R phrases
2.2 Labelling elements	
2.2.1 Labelling in accordance with EC Regulation No 1272/2008 (CLP/GHS)	
Pictogram	
Signal word	WARNING
Hazard statements	
H351	Suspected of causing cancer
Precautionary statements	
P281 P308+313	Use personal protective equipment as required IF exposed or concerned: Get medical advice/attention
2.3 Other hazards	
The product contains substances that have a workplace exposure limit (WEL)	

3 COMPOSITION / INFORMATION ON INGREDIENTS				
Chemical characterisation	Activated carbon virgin coconut shell plus additives			
Chemical name	CAS-No	EINECS/ELINCS	Classification	Concentration
Activated Carbon REACH Registration No. 01-2119488894-16-0000	7440-44-0	231-153-3	CHIP:: Not classified CLP: Not classified	80%
Copper II oxide	1317-38-0	215-269-1	CHIP: N: R50 CLP: Aquatic Acute 1 H400 (M=1)	<12%
Molybdenum trioxide	1313-27-5	215-204-7	CHIP: Carc. Cat. 3 R40; Xi: R36/37 CLP: Eye Irrit. 2 H319; STOT SE 3 H335; Carc. 2 H351	<3%

4 FIRST AID MEASURES	
4.1 Description of measures	
Inhalation	Remove casualty to fresh air. If necessary, seek medical advice
Skin contact	Clean areas of skin affected with soap and plenty of water. If necessary, seek medical advice
Eye contact	Wash out eye thoroughly with plenty of water until irritation subsides; if necessary consult an eye specialist/ophthalmologist
Ingestion	If product is swallowed, do NOT induce vomiting. Drink plenty of water; if necessary, seek medical advice
4.2	Most important effects/symptoms None known
4.3	Immediate/special treatment Treat Symptomatically

5 FIRE FIGHTING MEASURES	
5.1	Extinguishing media To suit local surroundings (e.g. water spray, carbon dioxide, foam or chemical powder)
5.2	Special hazards High dust levels in air may presents an explosion hazard and which may be ignited by sparks, flame or static discharge
5.3	Advice for fire fighters Self-contained breathing apparatus

6 ACCIDENTAL RELEASE MEASURES		
6.1	Personal precautions	Adhere to personal protective measures. Avoid inhalation of dust
6.2	Environmental precautions	Do not allow to get into waste water or waterways; if this occurs, inform the relevant water authority at once
6.3	Methods and materials for cleaning up	In the event of spillage, add damp sand and take up mechanically (e.g. sweep or vacuum up) using non-spark tools into tightly closed containers. Adhere to personal protective measures. Label container and dispose of as prescribed. Do not sweep up dry dust because of risk of ignition
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. Keep away from incompatible materials. Wet activated carbon removes oxygen from air causing a severe hazard (oxygen deficient atmosphere) to workers inside carbon vessels and enclosed or confined spaces. Establish Confined Space Entry Procedures before entering
7.2	Conditions for safe storage	Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry
7.3	Specific end use(s)	As a gas adsorbent

8 EXPOSURE CONTROLS / PERSONAL PROTECTION					
8.1	Workplace Exposure Limits (WELs) have been assigned by the HSE (EH40/2005)				
	LTEL (8 hours)	ppm	10	mg/m ³	Inhalable dust
	LTEL (8 hours)	ppm	4	mg/m ³	Respirable dust
	LTEL (8 hours)	ppm	1	mg/m ³	Copper dust (as Cu)
	STEL (15 mins)	ppm	2	mg/m ³	Copper dust (as Cu)
	LTEL (8 hours)	ppm	10	mg/m ³	Molybdenum compounds (as Mo)
	STEL (15 mins)	ppm	20	mg/m ³	Molybdenum compounds (as Mo)
8.2	Exposure controls				
	Engineering controls	Provide adequate ventilation (e.g. local exhaust ventilation)			
	Personal protection	Observe normal standards for handling chemicals Wash hands before breaks and after work. Avoid raising dust Wear personal protective equipment appropriate to the task (see below)			
	Eye protection	Chemical goggles or safety glasses with side shields			
	Skin protection	Rubber gloves (consider your own risk assessment; e.g. breakthrough times, rates of diffusion and degradation, tasks undertaken)			
	Respiratory protection	NIOSH Approved dust respirator if conditions are dusty			
	Other protection	Protective overalls			

9 PHYSICAL AND CHEMICAL PROPERTIES				
9.1	Basic physical and chemical properties			
	Physical form	Amorphous solid	Colour	Black
	Odour	Odourless	pH	Not determined
	Boiling pt/range	4000°C	Melting pt/range	Not determined
	Flash point	Not Determined	Relative density	0.49-0.56 g/ml
	Water solubility	Insoluble		

10 STABILITY AND REACTIVITY		
10.1	Reactivity	Stable under normal conditions of handling
10.2	Chemical stability	Stable under normal conditions of handling
10.3	Hazardous reactions	Hazardous polymerisation will not occur
10.4	Conditions to avoid	Heat - high temperatures
10.5	Incompatible material	Water reactive chemicals, strong oxidizers, strong acids
10.6	Hazardous decomposition products	Acrid smoke and irritating fumes - oxides of carbon, molybdenum and copper

11 TOXICOLOGICAL INFORMATION																	
11.1	Information on toxicological effects																
	<table border="1"> <tr> <td>Acute toxicity</td> <td> LD₅₀ rat (oral) LC₅₀ rat (inhal) LD₅₀ rat (oral) LD₅₀ rat (derm) LC₅₀ rat (inhal) LD₅₀ rat (oral) LD₅₀ rat (derm) </td> <td> > 10,000 mg/kg > 64,000 mg/m³ > 5,000 mg/kg > 2,000 mg/kg > 5.8 mg/l > 2,500 mg/kg > 2,000 mg/kg </td> <td> Data for activated carbon Data for activated carbon Data for molybdenum oxide Data for molybdenum oxide Data for molybdenum oxide Data for copper oxide Data for copper oxide </td> </tr> <tr> <td>Dermal compatibility</td> <td colspan="3">No data available</td> </tr> <tr> <td>Mucous membrane</td> <td colspan="3">No data available</td> </tr> <tr> <td>Further information</td> <td colspan="3">This product is not expected to cause long-term adverse health effects, any mutagenic effects or reproductive or developmental health effects. Equivocal evidence of carcinogenic activity of molybdenum trioxide in male F344/N rats</td> </tr> </table>	Acute toxicity	LD ₅₀ rat (oral) LC ₅₀ rat (inhal) LD ₅₀ rat (oral) LD ₅₀ rat (derm) LC ₅₀ rat (inhal) LD ₅₀ rat (oral) LD ₅₀ rat (derm)	> 10,000 mg/kg > 64,000 mg/m ³ > 5,000 mg/kg > 2,000 mg/kg > 5.8 mg/l > 2,500 mg/kg > 2,000 mg/kg	Data for activated carbon Data for activated carbon Data for molybdenum oxide Data for molybdenum oxide Data for molybdenum oxide Data for copper oxide Data for copper oxide	Dermal compatibility	No data available			Mucous membrane	No data available			Further information	This product is not expected to cause long-term adverse health effects, any mutagenic effects or reproductive or developmental health effects. Equivocal evidence of carcinogenic activity of molybdenum trioxide in male F344/N rats		
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12 ECOLOGICAL INFORMATION					
12.1	Toxicity	LC ₅₀	Aquatic organisms	mg/l	Not determined
12.2	Degradability	Not determined	12.3	Bioaccumulative potential	Not expected to bioaccumulate
12.4	Mobility in soil	Not determined	12.5	PBT/vPvB assessment	Not applicable
12.6	Other adverse effects	None known			

13 DISPOSAL CONSIDERATIONS	
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. The Hazardous Waste (England & Wales) Regulations 2005. Material is a special waste under UK legislation
Contaminated packaging	Treat empty containers in the same way as the product. If possible wash out thoroughly and recycle

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

15 REGULATORY INFORMATION		
15.1	Safety, health and environmental regulations	In accordance with the Chemicals (Hazard Information and Packaging for Supply) Regulations (CHIP 4) and EC Regulation 1272/2008 (CLP) the product is not classified. 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 prepared in accordance with EC Regulation 1272/2008 (CLP)		
Hazard statements and Risk phrases referred to in sections 2/3			
H351	Suspected of causing cancer	R40	Limited evidence of carcinogenic effect
Comply with COSHH Regulations			
Sources of data	Other suppliers' safety data sheets, Annex VI of the CPL Regulation (EC) No 1272/2008, EH40 (2011)		
Date of issue	30/03/2014		
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			