

Material Safety Data Sheet

Chemical Product and Company Identification

Product name: AquaSorb[®], ColorSorb[®], DioxSorb[®], EcoSorb[®], GoldSorb[®]
 Chemical name: Activated Carbon
 Chemical family: Carbon
 Formula: C
 CAS Registry Number: 7440-44-0

Company: Jacobi Carbons Ltd Jacobi Carbons AB
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 Birkenhead S112 65 Stockholm
 UK CH41 1LT Sweden

For information: +44 (0) 151 649 8344 (9:00am – 17:00am)
 In an emergency: as above

Composition / Information on Ingredients

Components	CAS#	% by wt.	Hazardous*
Carbon	7440-44-0	≥95%	No

*by OSHA definition, 29 CFR 1910.1200 (See Section 3 for Hazards Identification, Section 8 for Exposure Guideline and Section 16 for other information.

Hazards Identification

This product is an odourless black powder, granule or extruded pellet. Never enter a confined space containing activated carbon as it will adsorb oxygen and asphyxiation may result. Prolonged or repeated exposure to dust may cause eye and respiratory tract irritation.

Potential Health Effects:

Routes of entry: Inhalation, ingestion, eye and skin contact.
 Medical conditions
 Aggravated by exposure: None documented.
 Eyes: Fine dust may cause irritation to eyes. May cause corneal damage that is unlikely to be permanent provided prompt washing is carried out
 Skin: Causes dryness and cracking of the skin, due to removal of natural oils
 Ingestion: Not Known
 Inhalation: High airborne concentrations may cause coughing, choking and respiratory difficulties. Significant oral doses may result in gastro-intestinal perforation

Target organ effects: Not Known
 Chronic effects: NTP: Not listed
 IARC: Not listed
 OSHA: Not regulated

First Aid Measures

Eyes:	Promptly flush eyes with running water for 15 minutes including water under eyelids. Obtain medical attention.
Skin:	Wash affected area well with water. Remove clothing, clean and dry thoroughly before re use. Get medical help if irritation develops.
Ingestion	Give ½ pint of warm water to drink. Seek medical help urgently. Do not induce vomiting.
Inhalation:	Remove to fresh air. Get medical help if irritation develops.

Fire Fighting Measures

Flammable properties:

Hazardous Combustion Products:	Material will burn in a fire, releasing combustion products of carbon monoxide, carbon dioxide and water.
General Hazards:	Other material adsorbed on to the carbon may also be released.
Extinguishing media:	Water fog, foam, dry chemical or carbon dioxide.
Fire fighting equipment:	Self-contained breathing apparatus and full body protective clothing.

Other information:

Flashpoint:	Not applicable.	
ASTM Ignition temperature D4366:	420 – 450°C	
Flammability Limits in Air (%) by volume:	LEL:	Not applicable
	UFL:	Not applicable

Accidental Release Measures

Notify safety personnel for large spills. Avoid generation of airborne dust. Collect solid for recovery or disposal. Personnel involved in clean up need protection against skin and eye contact and inhalation of dust or mist.

Handling and Storage

Handling:	Follow good handling and housekeeping procedures, avoid spills, accumulation of dust and generation of airborne dust. Avoid prolonged contact with skin and eyes. Avoid inhalation of dust. Wear protective gloves and safety glasses or goggles. Use in a well ventilated area.
Storage:	Store in a sealed container in a clean, dry, well ventilated area away from strong oxidisers, strong acids, ignition sources, combustible materials and heat.

Exposure Controls & Personal Protection

Eye protection:	Wear safety glasses with side shields, safety goggles or a face shield, especially in dusty conditions. Provide an eye wash station nearby.
Skin protection:	Gloves and overalls should be worn when handling this product.
Respiratory protection:	A dust mask meeting CEN or NIOSH regulations should be worn whilst handling this product.
Occupational exposure limits:	OSHA and ACGIH suggest that exposure to any dust or mist be kept below the level of a nuisance particulate. For particulates not otherwise regulated, the OSHA PEL for the respirable fraction is 5mg m^{-3} and for total dust the OSHA PEL is 15mg m^{-3} . The ACGIH threshold limit value for particulates not otherwise classified (PNOC) is 10mg m^{-3} for an 8-hour TWA.

Physical and Chemical Properties (typical)

Boiling point °C:	Not known	Solubility in water:	Insoluble
Melting point °C:	851	Physical state:	Irregular solid
Freezing point °C:	N/a	Odour:	Odourless
Vapour pressure (mm Hg):	N/a	Apparent density (g cm^{-3}):	0.30-0.60

Stability and Reactivity

Chemical stability:	Stable.
Conditions to avoid:	Heat and ignition sources, strong oxidisers, strong acids and combustible materials.
Hazardous decomposition products:	CO, CO ₂
Hazardous polymerisation:	None.

Toxicological Information

Eyes:	see Potential Health Effects (Section 3)
Skin:	see Potential Health Effects (Section 3)
Inhalation:	see Potential Health Effects (Section 3)
Ingestion:	see Potential Health Effects (Section 3)
Sub chronic effects:	not established
Teratology (birth defects):	not established
Mutagenicity (genetic effects):	not established

Ecological Information

Practically non toxic to living resources – 96 hr LC50=100-1000mg/l
 Ecotoxicity: - Increase in pH 10 or more is lethal to aquatic life
 No evidence of bioaccumulation or tainting of seafood

Disposal Considerations

Virgin activated carbon is not classified as a hazardous waste; if in any doubt consult local waste authority.

Transport Information

UN-No: Not classified as dangerous in the meaning of transport regulations.
IMDG Class: Not applicable

Regulatory information

Labelling: Not classified as hazardous to users

Other Information

Our ref: MSDS 93-112-EC
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The information contained within this document is furnished without warranty of any kind. Users should consider this data only as a supplement of other information gathered by them and make independent determinations of suitability and completeness of information from all sources to ensure proper use and disposal of these materials and the safety of employees and customers.

ABBREVIATIONS

1. ACGIH American Conference of Governmental Industrial Hygienists
2. BOD_x Biochemical Oxygen Demand (After x Days)
3. CERCLA Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)
4. CFR Code of Federal Regulations
5. COD Chemical Oxygen Demand
6. cps Centipoise
7. DOT Department of Transportation
8. EPA Environmental Protection Agency
9. HMIS Hazardous Material Information System
10. IARC International Agency for Research on Cancer
11. LC₅₀ A single calculated concentration in air or water resulting in 50% mortality of a group of test animals
12. LD₅₀ A single calculated dose of a material expected to kill 50% of a group of test animals
13. LEL Lower Explosive Limit in Air
14. MSHA Mine Safety and Health Administration
15. NIOSH National Institute for Occupational Safety and Health
16. NTP National Toxicology Programs
17. OSHA Occupational Safety and Health Administration
18. PEL Permissible Exposure Limit established by OSHA
19. SARA Superfund Amendments and Reauthorisation Act
20. TLV Threshold Limit Value
21. TSCA Toxic Substances Control Act
22. TOC Total Organic Carbon
23. UEL Upper Explosive Limit in Air

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