

## SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

GHS Product identifier: Activated Charcoal  
Other means of identification: Activated Carbon Powder, Hydriffin SC11  
Recommended use of the product and restrictions on use: Activated Charcoal is administered orally to absorb certain drugs or toxins to prevent or reduce their systemic absorption.  
Supplier's Details: Pharmachem  
Unit 6, 70 Fison Ave West  
Eagle Farm QLD 4009  
Telephone: (07) 3868 0333  
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## SECTION 2 HAZARDS IDENTIFICATION

Classification of Product:  
This product is classified as a health hazard in accordance with the following classification criteria of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Fourth Revised Edition. It is also classed as dangerous goods under The Australian Code for the Transport of Dangerous Goods by Road and Rail.

Health hazards: Causes skin irritation, causes serious eye irritation, respiratory irritant

Skin irritant Category 2

GHS label elements, including precautionary statements:

Pictogram:



Signal word: Warning

Hazard statement: Causes skin irritation

Precautionary statements:

Prevention: Keep out of reach of children  
Wear suitable protective clothing and gloves  
Do not eat drink or smoke when using this product  
Wash hands thoroughly after handling

Response: Take off contaminated clothing. Wash contaminated clothing before re-use.  
If on skin wash with plenty of soap and water  
If skin irritation occurs get medical advice/attention

Eye irritant: Category 2A

GHS label elements, including precautionary statements:

Pictogram:



Signal word: Warning  
Hazard statement: Causes serious eye damage/eye irritation  
Precautionary statements:  
Prevention: Avoid contact with eyes. Wear safety glasses / goggles  
Wash hands thoroughly after handling  
Response: If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Get medical advice.

Specific target organ toxicity, single exposure; Respiratory tract irritation - Category 3  
GHS label elements, including precautionary statements:  
Pictogram:



Signal word: Warning  
Hazard statement: May cause respiratory irritation  
Precautionary statements:  
Prevention: Avoid breathing dust  
Wash hands thoroughly after handling  
Use only outdoors or in well-ventilated area  
Wear protective gloves and clothing.  
Response: If inhaled remove person to fresh air and keep comfortable for breathing  
call a doctor or Poisons Information Centre if you feel unwell.

Storage and disposal:  
Store locked up in a well-ventilated area. Keep container tightly closed.  
Dispose of unused product and empty container in accordance with local authority regulations.

Other Health Hazards:  
Activated carbon (especially when wet) can deplete oxygen from air in enclosed spaces, and dangerously low levels of oxygen may result. When workers enter a vessel containing activated carbon, follow procedures for potentially low oxygen. Workers should also take appropriate precautions when dealing with spent (used) activated carbons which may exhibit properties of adsorbed materials.

### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Cas No.	Proportion (% W/V)
Carbon	7440-44-0	100

### SECTION 4 FIRST AID MEASURES

Inhalation: Remove the source of contamination or move the victim to fresh air. Seek medical attention if condition persists.

Ingestion: Immediately rinse mouth with water. Give water to drink. DO NOT INDUCE vomiting. Seek immediate medical assistance Note: Never give an unconscious person anything to drink

Skin: Remove contaminated clothing and wash skin thoroughly with soap and water. Seek medical attention if irritation occurs.

Eye: If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice.

First Aid Facilities: Eye wash station, safety shower and normal washroom facilities.

Advice to Doctor: Treat symptomatically and supportively.

## SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing media: Use water spray, dry chemical, carbon dioxide, fog or ordinary foam.

Hazards from combustion products: Combustion products may include smoke and oxides of carbon (for example, carbon monoxide). Materials allowed to smoulder for long periods in enclosed spaces, may produce an amount of carbon monoxide which reach the lower explosive limit (carbon monoxide LEL= 12.5% in air). Under certain conditions, any airborne dust may be an explosion hazard. Used activated carbon may produce additional combustion products.

Special protective precautions and equipment for fire fighters: If possible to do safely, move smouldering activated carbon to a non-hazardous area, preferably out of doors. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face-piece operated in pressure-demand or positive-pressure mode.

Additional information: Contact with strong oxidizers may cause fire or explosion. Activated carbon mixed with hydrocarbons, such as oils, diesel fuel, petrol (gasoline), organic solvents, paint thinners, grease, etc is prone to spontaneous combustion.

Hazchem Code: None allocated

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: Wear suitable protective clothing. Shut off ignition sources.

Methods and materials for containment and clean up: Using a clean shovel, carefully place material into clean, dry container and cover; remove from area for disposal. Flush spill area with water.

## SECTION 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin and eyes. Follow good handling practices to minimize spills, generation of airborne dusts, and accumulation of dusts on exposed surfaces.

Conditions for safe storage, including any incompatibilities: Store locked up in a well-ventilated area. Keep container tightly closed.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

National exposure standards:	No exposure standards have been established for this material, by Worksafe Australia. However, the AIOH <sup>1</sup> recommends a TWA exposure standard for dusts/mists not otherwise specified of 5 mg/m <sup>3</sup> for the inhalable fraction and 1 mg/m <sup>3</sup> for the respirable fraction.
Biological limit values:	None set
Engineering controls:	A system of local and/or general exhaust is recommended to keep employee exposure below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal protective equipment:	Prevent skin and eye exposure. Clean overalls or protective clothing should be worn together with impermeable (rubber or PVC) protective gloves. Eye protection in the form of goggles or full face shield is advisable. Wash contaminated clothing and other protective equipment before storing or re-using.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Black powder or granules
Odour:	Odourless
Solubility in Water:	Insoluble
Density (Bulk):	300-500 kg/m <sup>3</sup>
Ignition Temperature:	>200 deg C.

## SECTION 10 STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions.
Conditions to avoid:	Incompatible materials.
Incompatible materials:	Strong acids. Strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate.
Hazardous decomposition products:	Oxides of carbon may be formed under fire conditions
Hazardous reactions:	Contact with strong oxidizing agents will result in an exothermic reaction and may result in rapid combustion.

## SECTION 11 TOXICOLOGICAL INFORMATION

Routes of Exposure:	Exposure to activated charcoal can occur through inhalation, skin and/or eye contact
Signs and symptoms of exposure:	
Inhalation Symptoms:	Cough, dyspnea (breathing difficulty), black sputum, decreased pulmonary function, lung fibrosis
Skin Symptoms:	Roughness.
Target Organs :	Respiratory system, cardiovascular system

<sup>1</sup> Dusts Not Otherwise Specified (Dust NOS) and Occupational Health Issues, AIOH Exposure Standards Committee Finalised May 2014 (reformatted May 2016)

Summary of Toxicology:

NIOSH<sub>2</sub> (The National Institute for Occupational Safety and Health (NIOSH), Toxicity Data

Measurement	System	Route/Organism	Dose	Effect	Date
Reproductive Effects		subcutaneous/rat	167 mg/kg (8D pregnant)	Reproductive: Effects on fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants)	March 2011
Acute Toxicity Data		intraperitoneal/Dog	Lethal dose: >5 gm/kg		March 2011
Acute Toxicity Data		intraperitoneal/mouse	Lethal dose: >5 gm/kg		March 2011
Acute Toxicity Data		intraperitoneal/rat	Lethal dose: >5 gm/kg		March 2011
Acute Toxicity Data		intravenous/mouse	lethal dose (50 percent kill): 440 mg/kg		March 2011

**SECTION 12 ECOLOGICAL INFORMATION**

Ecotoxicity: No information available. Product is insoluble in water and separated by all filtration and sedimentation processes. As a precaution, do not contaminate waterways with the product or used containers.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Disposal methods and containers:  
Do not burn unused product or empty containers. Unused product and containers should be disposed of in accordance with local authority instructions.

**SECTION 14 TRANSPORT INFORMATION**

U.N. Number: 1362  
 DG Class: 4.2  
 Hazchem Code: None Allocated  
 Packing Group: III

**SECTION 15 REGULATORY INFORMATION**

<sup>2</sup>The National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, GA 30329-4027 USA

Activated charcoal is not a chemical product as far as the Agricultural and Veterinary Chemicals Code Act is concerned and does not require registration by the Australian Pesticides & Veterinary Medicines Authority (APVMA).

Charcoal appears in the Australian Inventory of Chemical Substances (AICS), and has been assessed as low concern to human health by application of expert validated rules.

This material has not been included in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) by the Commonwealth Department of Health.

## SECTION 16 OTHER INFORMATION

MSDS version:	1
Date of Revision:	September 2017
Update of sections:	Update to GHS

### CONTACT POINT

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### References:

1. FAISD Handbook, Handbook of First Aid Instructions, Safety Directions, Warning Statements, and General Safety Precautions for, Agricultural and Veterinary Chemicals, (as updated)
2. Approved Criteria For Classifying Hazardous Substances, NOHSC:1008 (2004)
3. National Code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC:2011]
4. AICS (Australian Inventory of Chemical Substances), Safework Australia
5. The Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) 7<sup>th</sup> Edition
6. The Poisons Standard (as updated), National Drugs and Poisons Schedule Committee
7. Hazardous Substances Information System, Safework Australia (as updated)
8. Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Third Revised Edition, United Nations, New York and Geneva, 2009
9. National Center for Biotechnology Information. PubChem Compound Database; CID=5462310, <https://pubchem.ncbi.nlm.nih.gov/compound/5462310> (as updated).
10. Chemical Classification and Information Database (CCID) (as updated), New Zealand Environmental Protection Authority, <http://www.epa.govt.nz/search-databases/Pages/HSNO-CCID.aspx>
11. NIOSH - The National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, <https://www.cdc.gov/niosh/index.htm> (as updated)

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