



Safety Data Sheet

Section 01 Identification

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| Product Identifier | Carbon, Activated Activated Carbon Dioxorb BP2-F Coal Activated Carbon Powdered Wood Addorb VQ1 Activated Carbon 4.0 mm Coal Aquasorb BP2 Powder Activated Carbon Coal Aquasorb BP2-F Powder Activated Carbon Coal Aquasorb BP5 Powder Activated Carbon Coal Aquasorb CS Granular Coconut Shell Activated Carbon, 12x40 Mesh Aquasorb CT Granular Coconut Shell Activated Carbon, 8x30 Mesh Aquasorb Granular Activated Carbon AD-VA3 4 mm Pellet Coal Aquasorb Granular Activated Carbon AS 1500 8x30 Coal Aquasorb Granular Cocnut Shell Activated Carbon 4x10 EcoSorb GXB 4 mm Pellet Carbon Coal Haycarb Granular Cocnut Shell Activated Carbon HRO 12x20 Haycarb Granular Cocnut Shell Activated Carbon HRO 12x30 Mesh Haycarb Granular Cocnut Shell Activated Carbon HRO 4x10 Mesh |
| Other Means of Identification | Activated granular carbon, activated powdered carbon, pelleted activated carbon, activated charcoal animal bone black. |
| Product Use and Restrictions on Use | Water purification, gold recovery and air scrubbing |
| Initial Supplier Identifier | ClearTech Industries Inc 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7 Phone: 800.387.7503 Fax: 888.281.8109 www.cleartech.ca |
| Prepared By | ClearTech Industries Inc. technical writer |
| 24-Hour Emergency Phone | 306.664.2522 |

Section 02 Hazard Identification

GHS-Classification

This product has been assessed in accordance with the Hazardous Products Regulations and is not classified as a hazardous substance or mixture.

Hazards Not Otherwise Classified

May ignite if dispersed in air.

Supplemental Information

Not available

Section 03 Composition / Information on Ingredients

Ingredients:

| Chemical name | Common name(s) | CAS number | Concentration (w/w%) |
|---------------|----------------|------------|----------------------|
| Carbon | Coal, charcoal | 7440-44-0 | >99% |

*Exact concentration withheld as a trade secret.

Section 04 First-Aid Measures

Description of necessary first-aid measures

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| Inhalation | Get medical advice / attention if you feel unwell or are concerned. |
| Ingestion | Get medical advice / attention if you feel unwell or are concerned. |
| Skin contact | Rinse skin with lukewarm, gently flowing water / shower for 5 minutes or until product is removed. If skin irritation occurs or if you feel unwell: Get medical advice / attention. |
| Eye contact | Gently brush product off face. Do not rub eyes. Let the eyes water naturally for a few minutes. Look right and left, then up and down. If particle / dust does not come out, cautiously rinse eye with lukewarm gently flowing water for 5 minutes or until particle / dust is removed, while holding the eyelids open. If eye irritation persists: Get medical advice / attention. Do not attempt to manually remove anything from the eyes. |

Most important symptoms and effects, both acute and delayed

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| Inhalation | May cause respiratory irritation. |
| Ingestion | May cause discomfort or nausea. |
| Skin contact | Not available |
| Eye contact | May cause eye irritation and redness. |
| Further information | For further information see Section 11 Toxicological Information. |

Section 05 Fire Fighting Measures

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| Suitable extinguishing media | Extinguish fire using extinguishing agents suitable for the surrounding fire. |
| Unsuitable extinguishing media | Water jets are not recommended in fires involving chemicals. |
| Specific hazards arising from the chemical | In the event of a fire oxides of carbon may be released. Dust from this product may ignite. After a fire this product can smolder for a long time. |
| Special protective equipment for fire-fighters | Wear NIOSH-approved self-contained breathing apparatus and protective clothing. |

Section 06 Accidental Release Measures

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| Personal Precautions / Protective Equipment / Emergency Procedures | Wear appropriate personal protective equipment (See Section 08 Exposure Controls and Personal Protection). Stay upwind, ventilate area. |
| Environmental Precautions | Prevent material from entering waterways, sewers or confined spaces. Notify local health and wildlife officials. Notify operators of nearby water intakes. |
| Methods and Materials for Containment and Cleaning Up | Dry sweeping is not recommended. Pre-dampening the material or use of a vacuum is preferred. Shovel into clean, dry, labeled containers and cover. Flush area with water. |

Section 07 Handling and Storage

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| Precautions for Safe Handling | Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure. Inspect containers for damage or leaks before handling. If the original label is damaged or missing replace with a workplace label. Have suitable emergency equipment for fires, spills and leaks readily available. |
| Conditions for Safe Storage | Store in a cool, dry, well-ventilated area, out of direct sunlight, away from heat sources and incompatible materials. Always store in original labeled container. Keep containers tightly closed when not in use and when empty. Protect label and keep it visible. |
| Incompatibilities | Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids, hypochlorites and permanganates. Solvents |

Section 08 Exposure Controls and Personal Protection

Exposure limits

There are no known exposure limits for this product.

Engineering controls

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| Ventilation Requirements | Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions should be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems. |
| Other | No specific recommendations beyond the required hygiene facilities at the place of work. |

Protective equipment

The following are recommendations only. It is the responsibility of the employer / user to conduct a hazard assessment of the process in which this product being used and determine the proper engineering controls and PPE for their process. Additional regulatory and safety information should be sought from local authorities and, if needed, a professional industrial hygienist.

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| Eye and face protection | Where there is potential eye or face exposure, safety glasses are recommended. Contact lenses are not recommended; they may contribute to severe eye injury. |
| Hand and body protection | Where handling this product it is recommended that skin contact is avoided. |
| Respiratory protection | In case of insufficient ventilation wear suitable respiratory equipment. |
| Thermal hazards | Not available |

Section 09 Physical and Chemical Properties

Appearance

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| Physical state | Solid (various states) |
| Colour | Black |
| Odour | Odourless |
| Odour threshold | Not applicable |

Property

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| pH | Not available |
| Melting point / freezing point | Sublimes >4000 °C |
| Initial boiling point and boiling range | Sublimes >4000 °C |

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| Flash point | Not applicable |
| Evaporation rate | Not available |
| Flammability | Flammable |
| Upper flammable limit | Not applicable |
| Lower flammable limit | Not applicable |
| Vapour pressure | <1 mm of Hg |
| Vapour density | Not available |
| Relative density | 200-700 kg/m ³ |
| Solubility | Not soluble in water |
| Partition coefficient: n-octanol/water | Not available |
| Auto-ignition temperature | 452-518 °C |
| Decomposition temperature | Not available |
| Viscosity | Not applicable |
| Specific gravity | Not applicable |
| Formula | C |
| Molecular weight | 12.01 |

Section 10 Stability and Reactivity

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|------------------------------------|---|
| Reactivity | Not available |
| Stability | This product is stable if stored according to the recommendations in Section 07. |
| Possibility of hazardous reactions | Not available |
| Conditions to avoid | Avoid contact with incompatible materials. Do not heat. |
| Incompatible materials | Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids, hypochlorites and permanganates. Solvents |
| Hazardous decomposition products | Thermal decomposition may produce oxides of carbon. |

Section 11 Toxicological Information

Acute Toxicity (LD50 / LC50 values)

| Component | Route | Species | Value | Exposure time |
|-----------|------------|---------|---------------|---------------|
| Carbon | Oral | Rat | >10 000 mg/kg | |
| | Inhalation | Rat | >64.4 mg/l | |

Toxic Health Effect Summary

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| Chemical characteristics | No known effects |
| Skin | Tested negative for skin irritation |
| Ingestion | May cause vomiting. |
| Inhalation | May cause mild irritation |
| Eye contact | Scored below 1 for OECD guideline 405 on corneal opacity, iritis, conjunctival redness, and conjunctival oedema. |

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| Sensitization | This product and its components at their listed concentration have no known sensitizing effects. |
| Mutagenicity | This product and its components at their listed concentration have no known mutagenic effects. |
| Carcinogenicity | This product and its components at their listed concentration have no known carcinogenic effects. |
| Reproductive toxicity | This product and its components at their listed concentration have no known reproductive effects. |
| Specific organ toxicity | This product and its components at their listed concentration have no known effects on specific organs. |
| Aspiration hazard | Aspiration may cause pulmonary edema. |
| Synergistic materials | Not available |

Section 12 Ecological Information

Ecotoxicity

there is no available toxicity data for this product.

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| Biodegradability | The domestic substance list categorizes carbon as persistent. |
| Bioaccumulation | The domestic substance list categorizes carbon as non-bioaccumulative. |
| Mobility | Not water soluble. |
| Other adverse effects | May absorb dissolved oxygen from water. |

Section 13 Disposal Considerations

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| Waste From Residues / Unused Products | Dispose in accordance with all federal, provincial, and local regulations including the Canadian Environmental Protection Act. |
| Contaminated Packaging | Do not remove label, follow label warnings even after the container is empty. Empty containers should be recycled or disposed of at an approved waste handling facility. |

Section 14 Transport Information

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| UN number | UN1362 (See additional information) |
| UN proper shipping name and description | CARBON, ACTIVATED |
| Transport hazard class(es) | 4.2 |
| Packing group | III |
| Excepted quantities | 0 |
| Environmental hazards | Not listed as a marine pollutant under Canadian TDG Regulations, schedule III. |
| Special precautions | No special provisions |
| Transport in bulk | ERAP index: not available |

MARPOL 73/78 and IBC Code:
This product is not listed in Chapter 17 of the IBC Code.

Additional information TDG regulations do not apply to charcoal or carbons that are carbons made by steam activation process [1.48 (c) (iii)] Secure containers (full or empty) during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 16 of this SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and published test data regarding the classification of this product are listed in the references at section 16 of this SDS.

Section 15 Regulatory Information.

NOTE: THE PRODUCT LISTED ON THIS SAFETY DATA SHEET HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN HAZARDOUS PRODUCTS REGULATIONS. THIS SAFETY DATA SHEET CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

All components of this product appear on the domestic substance list.

Section 16 Other Information

Date of latest revision: May 07, 2020

Note: The responsibility to provide a safe workplace remains with the buyer / user. The buyer / user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the buyer / user to comply with all applicable laws and regulations regarding handling, using, reselling and shipping this product.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the RDC Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

- 1) CHEMINFO
- 2) TOXNET
- 3) eChemPortal
- 4) ECHA
- 5) Transportation of Dangerous Goods Canada
- 6) HSDB
- 7) PAN