

**SAFETY DATA SHEET**  
**NutriBind® HDPAC**



Creation Date: 1/1/2016  
Revision Date: 6/1/2023  
Version 1.1  
SDS # 19B

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

Product Name: NutriBind® HDPAC

Synonyms: Activated Carbon

Trade Name: Powdered Activated Carbon (PAC)

Product Form: Powder/Solid

**Recommended use of the chemical and restrictions on use**

Recommended Use: Remediation of contaminated groundwater and soils.

Identified Uses: Liquid and vapor applications (purification, decolorization, separation, catalyst, and deodorization)

Restrictions on Use: Use as recommended by the label

**Details of the supplier and of the safety data sheet**

Supplier: Tersus Environmental, LLC  
1116 Colonial Club Rd  
Wake Forest, NC 27587  
Phone: +1-919-453-5577  
Email: [info@tersusenv.com](mailto:info@tersusenv.com)

**Emergency telephone number**

For leak, fire, spill or accident emergencies, call:

+1-919-453-5577 (Tersus Office Hours, 8:00 AM to 5:00 PM Eastern)

+1-800-424-9300 (Chemtrec 24 Hour Service – Emergency Only)

**2. HAZARDS IDENTIFICATION**

**GHS Classification of the Substance or Mixture including Precautionary Statements:**

Emergency Overview: This chemical is considered hazardous according to OSHA 29 CFR 1910.1200 HCS.

Potential Health Effects: Medical conditions aggravated by exposure: Asthma, Respiratory disorder, Skin disorders.

Physical hazards: Not classified.

Health hazards: Eye irritation, Category 2B, Respiratory irritation, Category 3. Skin Irritation.

Environmental hazards: No special environmental precautions required. See Section 12.

OSHA defined hazards: Hazardous.

Chronic Effects: No information available.

Carcinogenic Effects: IARC: Not listed NTP: Not listed OSHA: Not regulated.

**Other hazards**

Prolonged over exposure to carbon dust can produce skin and eye irritation. Prolonged inhalation can cause irritation of mucus membranes.

Label elements

Hazard Pictograms: None

**Other Hazards Not Otherwise Classified (HNOC):**

Odorless black granules or powder. Avoid contact with skin and eyes. Avoid breathing dust. Activated carbon (especially when wet) can deplete oxygen from air in enclosed spaces, and dangerously low levels of oxygen may result. Prior to entering a confined space that contains or previously contained activated carbon, the space should be evaluated for oxygen and carbon monoxide concentrations, and any other hazards, by a qualified person.

Workers should also take appropriate precautions when dealing with spent (used) activated carbons which may exhibit hazardous properties associated with the adsorbed materials.

Avoid dust formation. Powdered material may form an explosible dust-air mixture. If transferring product under pressure, avoid generation of dust if an ignition source is present.

Activated carbons have high surface area which may cause self-heating during oxidation. See Section 5.

Do not generate dust because airborne respirable crystalline silica may be generated.

**Potential health effects**

<b>Principle Routes of Exposure:</b>	Inhalation, Eye contact, Skin Contact
<b>Eye Contact:</b>	May cause mechanical irritation. Avoid contact with eyes.
<b>Skin Contact:</b>	May cause mechanical irritation. Avoid contact with skin.
<b>Inhalation:</b>	Dust may be irritating to respiratory tract. Provide appropriate local exhaust ventilation at machinery and at places where dust can be generated. See also Section 8.
<b>Ingestion:</b>	Adverse health effects are not known or expected under normal use.
<b>Carcinogenicity:</b>	See Section 11.
<b>Target Organ Effects:</b>	Lungs, Eyes, Skin
<b>Medical Conditions Aggravated by</b>	Asthma, Respiratory disorder, Skin disorders Exposure:
<b>Potential Environmental Effects:</b>	No special environmental precautions required. See also Section 12.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Substance</b>	Carbon
<b>Chemical formula</b>	C
<b>Molecular weight</b>	12.01 g/mole

Chemical Name	CAS number	Concentration (%)	PEL(OSHA)	TLV(ACGIH)	OTHER
Activated Carbon	7440-44-0	100	N/A	N/A	N/A

This product, which is manufactured from a naturally occurring raw material(s), contains <10% total crystalline silica (quartz, CASRN 14808-60-7).

ACGIH (TWA) for respirable dust is 2.5 mg/m<sup>3</sup>.

There are no established PEL, TWA or TLV values for this material. Caution should be taken for respirable dust. The product has no known carcinogenic properties.

Synonyms are provided in Section 1.

Occupational exposure limits, if available, are listed in Section 8.

#### 4. FIRST AID MEASURES

Eye Contact	Flush eyes immediately with lukewarm of water for 15 minutes. Lift upper and lower eye lids occasionally. Seek medical attention if symptoms develop.
Skin Contact	Wash thoroughly with soap and water. Seek medical attention if symptoms develop.
Inhalation	If cough, shortness of breath or other breathing problems occur, move to fresh air. Seek medical attention if symptoms persist. If necessary, restore normal breathing through standard first aid measures.
Ingestion	Do not induce vomiting. If conscious, give several glasses of water or milk. Never give anything by mouth to an unconscious person. Seek medical attention.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in Section 2 and/or in Section 11.
Indication of any immediate medical attention and special treatment needed	Note to physicians: Treat symptomatically.
Route(s) of Entry:	
Ingestion:	Carbon is non-toxic through ingestion. Dust may cause mild irritation to the digestive tract resulting in nausea or diarrhea.
Inhalation:	The physical nature of carbon may irritate the respiratory system. Dust may cause mild irritation to the upper respiratory tract.
Skin:	Carbon is non-toxic through skin absorption. Dust may cause mild irritation, probably reddening.
Eye Irritation:	The physical nature of carbon may cause eye irritation. Dust may cause mild irritation probably reddening.

## 5. FIRE-FIGHTING MEASURES

### FIRE & EXPLOSION DATA:

Flash Point: N/A

Decomposition Products: CO may be formed in fire.

Thermal Decomposition: Sulfur Oxides (SOx)

### FIRE FIGHTING MEASURES:

Flashpoint: Not Applicable.

Non-flammable: 16CFR1500.44.

Not Self Heating: UN Manual of Tests and Criteria, Test N.3.

Flammability Limits in Air: LFL and UFL Not Applicable.

#### General Information

Carbon Monoxide and Carbon Dioxide gas may be generated during combustion. Caution is advised.

Contact of activated carbon with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion.

Fire is possible at elevated temperatures or by contact with an ignition with most types of organic solids. Activated carbon is difficult to ignite and when it does, it tends to burn or smolder very slowly without any smoke or flame.

Toxic gases will form upon combustion.

#### Suitable Extinguishing Media

Use foam, carbon dioxide (CO<sub>2</sub>), dry chemical or water spray. Fog is recommended if water is used.

#### Unsuitable Extinguishing Media

DO NOT USE a solid water stream as it may scatter and spread fire. In the event of a fire, spreading large amounts of activated carbon is not recommended due to the risk of creating uncontrolled dust emissions.

#### Specific Hazards Arising from the chemical or mixture

Burning produces irritant fumes. If transferring product under pressure, avoid generation of dust if an ignition source is present.

Activated carbons have high surface area which may cause self-heating during oxidation. An adequate air gap between packages of activated carbon is recommended to reduce risk of propagation of the event. Activated carbon is difficult to ignite and tends to burn slowly (smolder) without producing smoke or flame.

#### Hazardous combustion products

Combustion products may include smoke and oxides of carbon (for example, carbon monoxide). Materials allowed to smolder or long periods in enclosed spaces, may produce amounts 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.

#### Advice for Firefighters

Firefighting personnel should wear full protective equipment, including self-contained breathing apparatus (SCBA) for all inside fires and large outdoor fires.

<b>Fire Fighting instruction</b>	If possible to do safely, move smoldering activated carbon to a non-hazardous area, preferably out of doors. Extinguish fire using water fog, fine water spray, carbon dioxide or foam. Avoid stirring up dust clouds.
<b>Firefighting Equipment</b>	Firefighting personnel should wear full protective equipment, including self-contained breathing apparatus (SCBA) for all inside fires and large outdoor fires.
<b>Hazardous Combustion Products</b>	Combustion products may include smoke and oxides of carbon (for example, carbon monoxide). Materials allowed to smolder or long periods in enclosed spaces, may produce amounts 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.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Reportable Quantities</b>	No EPA requirements.
<b>Personal Precautions</b>	Avoid dust formation. Ensure adequate ventilation. Use personal protective equipment. See also Section 8.
<b>Environmental Precautions</b>	The carbon is not soluble in water; however, dust particles can cause a particulate emission if discharged to waterways. Block all entrances to sewers and drains to avoid introducing the material into the waterways.
<b>Methods for Containment</b>	Block all entrances to sewers and drains. Vacuum, shovel or sweep up spilled material, neutralize and place in closed container for disposal. Do not release to sewer or waterway
<b>Methods for Clean Up</b>	Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation. Use of a vacuum with high efficiency particulate air (HEPA) filtration is recommended. Do not create a dust cloud by using a brush or compressed air. Pick up and transfer to properly labelled containers. Spent granular activated carbon may be recyclable. Dispose of virgin (unused) carbon (surplus or spillage) in a facility permitted for non-hazardous wastes. Spent (used) carbon should be disposed of in accordance with applicable laws. Do not reuse empty bags: dispose of in a facility permitted for non-hazardous wastes. See Section 13.
<b>Waste Disposal Method</b>	Used product may contain hazardous chemicals or hazardous properties that may have to be examined to determine proper disposal method. Dispose in accordance with local, state, and federal regulations.
<b>Disposal Considerations</b>	Activated carbon, in its original state, is not a hazardous material or hazardous waste. Follow applicable governmental regulations for waste disposal. Used activated carbon may become classified as a hazardous waste depending upon the application.

Follow applicable regulations for disposal.  
 Recycling (reactivation) may be a viable alternative to disposal.  
 Contact Carbon Activated Corp. for information.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust.

Provide appropriate local exhaust ventilation at machinery and at places where dust can be generated. Do not create a dust cloud by using a brush or compressed air. Dust may form explosible mixture in air.

Activated carbons have high surface area which may cause self-heating during oxidation. Take precautionary measures against static discharges. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations. Fine dust is capable of penetrating electrical equipment and may cause electrical shorts. If hot work (welding, torch cutting, etc.) is required the immediate work area must be cleared of product and dust.

### Hygiene measures

Handle in accordance with good industrial hygiene and safety procedures. Workers should wash hands and face before eating, drinking, and smoking.

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool, and well-ventilated place. Keep away from heat and sources of ignition. Do not store together with strong oxidizing agents. Keep in properly labeled containers. Activated carbon is difficult to ignite and tends to burn slowly (smolder) without producing smoke or flame. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosible mixture if they are released in the atmosphere in sufficient concentrations. Prior to entering a confined space that contains or previously contained activated carbon, the space should be evaluated for oxygen and carbon monoxide concentrations, and any other hazards, by a qualified person.

**Incompatible products:** Strong oxidizing agents. Strong acids.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

### Control parameters

Exposure guidelines, ingredients with workplace control parameters.

### Dust, or Particulates Not Otherwise Specified:

Austria MAK:	10 mg/m <sup>3</sup> , STEL 2x30 min, Inhalable dust
	5 mg/m <sup>3</sup> , TWA, Inhalable dust

Belgium:	10 mg/m <sup>3</sup> , TWA, Inhalable 3 mg/m <sup>3</sup> TWA, Respirable
Canada (Saskatchewan):	10 mg/m <sup>3</sup> , TWA, Inhalable 3 mg/m <sup>3</sup> TWA, Respirable
China:	8 mg/m <sup>3</sup> , TWA 10 mg/m <sup>3</sup> , STEL
France:	10 mg/m <sup>3</sup> , TWA Inhalable dust 5 mg/m <sup>3</sup> , TWA Respirable dust
Germany - TRGS 900:	10 mg/m <sup>3</sup> , TWA, Inhalable 3 mg/m <sup>3</sup> , Respirable fraction
Hong Kong:	10 mg/m <sup>3</sup> , TWA
Ireland:	10 mg/m <sup>3</sup> , TWA, Total inhalable 4 mg/m <sup>3</sup> , TWA, Respirable
Italy:	10 mg/m <sup>3</sup> , TWA, Inhalable 3 mg/m <sup>3</sup> , TWA, Respirable
Japan:	3 mg/m <sup>3</sup> TWA, Respirable
Malaysia:	10 mg/m <sup>3</sup> , TWA, Inhalable 3 mg/m <sup>3</sup> , TWA, Respirable
The Netherlands:	3.5 mg/m <sup>3</sup> , Inhalable
Spain:	10 mg/m <sup>3</sup> , VLA, Inhalable 3 mg/m <sup>3</sup> , VLA, Respirable
Sweden:	10 mg/m <sup>3</sup> , NGV, Total inhalable 5 mg/m <sup>3</sup> , NGV, Respirable
United Kingdom - WEL:	10 mg/m <sup>3</sup> , TWA, Total Inhalable dust 4 mg/m <sup>3</sup> , TWA, Respirable dust
US ACGIH – PNOS:	10 mg/m <sup>3</sup> , TWA, Inhalable 3 mg/m <sup>3</sup> , TWA, Respirable
US OSHA - PEL:	15 mg/m <sup>3</sup> , TWA, Total dust 5 mg/m <sup>3</sup> , TWA, Respirable

**Silica, Crystalline  
(Quartz) CAS RN  
14808-60-7:**

Austria MAK:	0.15 mg/m <sup>3</sup> , TWA (Respirable)
Belgium:	0.1 mg/m <sup>3</sup> , TWA (Alveolar fraction)
Denmark:	0.1 mg/m <sup>3</sup> , TWA (Respirable)
Finland:	0.05 mg/m <sup>3</sup> , TWA (Respirable)
France:	0.1 mg/m <sup>3</sup> , VME (Alveolar fraction)
Ireland:	0.1 mg/m <sup>3</sup> , TWA (Respirable)
Italy:	0.025 mg/m <sup>3</sup> , TWA (Respirable)
Japan:	(3 mg/m <sup>3</sup> )/(1.19 % SiO <sub>2</sub> + 1) (Respirable)
Switzerland:	0.15 mg/m <sup>3</sup> , TWA (Respirable)
UK WEL:	0.1 mg/m <sup>3</sup> , TWA (Respirable)
US OSHA PEL:	(10 mg/m <sup>3</sup> )/( % SiO <sub>2</sub> + 2) (Respirable)
	(30 mg/m <sup>3</sup> )/( % SiO <sub>2</sub> + 2) (Total)
US ACGIH TLV:	0.025mg/m <sup>3</sup> (Respirable)

**MAK:** Maximale Arbeitsplatzkonzentration (Maximum Workplace Concentration)

**NGV:** Nivå Gräns Värde (Level Limit Value)

**PEL:** Permissible Exposure Limit

**STEL:** Short Term Exposure Limit

**TLV:** Threshold Limit Value

**TRGS:** Technische Regeln für Gefahrstoffe (Technical Rule for Hazardous Materials)

**TWA:** Time Weighted Average

**US ACGIH:** United States American Conference of Governmental Industrial Hygienists

**US OSHA:** United States Occupational Safety and Health Administration

**VLA:** Valore Límite Ambientales (Environmental Limit Value)

**WEL:** Workplace Exposure Limit

### Exposure Control

#### Protective equipment



#### Appropriate engineering controls

Exhaust ventilation should be designed to prevent accumulation and recirculation in the workplace and safely remove carbon black from the air.

Note: Wet activated carbon removes oxygen from air causing a severe hazard to workers in enclosed or confined space. If risk of overexposure exists, wear an approved respirator. Provide adequate ventilation in warehouse or closed storage area.

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Safety glasses with side shields are recommended for any type of handling. Where eye contact or dusty conditions may likely, dust tight goggles are recommended. Have eye washing equipment available.

#### Respiratory protection

Follow the OSHA respiratory regulations found in 29 CFR 1910.134 or European Standard EN149. Keep dust exposure to a minimum with engineering and administrative controls. Use appropriate NIOSH/MSHA approved particulate respirators if necessary. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Use type N95 (US) or type P1 (EN 143) dust masks for nuisance levels of dust.



<b>Hand protection</b>	Use of NIOSH approved particulate filter is recommended if dust is generated in handling. The usual precautionary measures for handling chemicals should be followed, i.e. gloves, safety glasses w/side shields or goggles, long sleeve shirt or lab coat, dust respirator if dusty and/or other protective clothing/equipment as determined appropriate.
<b>Exposure Guidelines</b>	Wet activated carbon removes oxygen from air posing a hazard to workers in enclosed or confined space. Before entering such an area, sample the air within to assure sufficient oxygen supply. Use work procedures for low oxygen levels, observing all local, state and federal regulations. Comment: Remove from the area any worker who shows allergic reactions from exposure to sulfur.
<b>Other skin and body protection</b>	Wear suitable protective clothing. Wash clothing daily. Work clothing should not be allowed out of the workplace.
<b>Hygiene measures</b>	The usual precautionary measures for handling chemicals should be followed: i.e., Keep away from food and beverage; remove contaminated clothing immediately; wash hands before breaks or eating; avoid contact with eyes and skin.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

#### General Information

Physical State	Solid
Appearance	Powder
Color	Black
Odor	Generally odorless. May produce slight sulfur smell when wet.
Odor threshold	Not Applicable
Molecular Weight	12.01 g/mole

#### Safety Data

Property	Value	Remarks / Method
pH:	7-10	Not Applicable
Melting point/freezing point:		Not Applicable
Boiling point / boiling range:		Not Applicable
Evaporation Rate:		Not Applicable
Vapor pressure:	0	Not Applicable
Vapor Density:	Solid	Not Applicable
Density:		No information available
Bulk Density:	25 - 35 lbs./ft <sup>3</sup>	
Specific Gravity		No information available
Water solubility:	Insoluble	
Solubility(ies):		No information available
Partition Coefficient (n-octanol/water):		No information available
Decomposition temperature:		No information available
Viscosity:		Not Applicable
Kinematic viscosity:		Not Applicable

Dynamic viscosity:		Not Applicable
Oxidizing Properties:		Not Applicable
Softening point:		No information available
VOC content (%):		Not Applicable
% Volatile (by Volume):		No information available
% Volatile (by Weight):		No information available
Surface Tension:		No information available
Explosive properties:		Dust may form explosible mixture in air
Flash Point:		Not Applicable
Flammability (solid, gas):		No information available
Flammability Limit in Air:		No information available
Explosion Limits in Air - Upper (g/m3):		No information available
Explosion Limits in Air - Lower (g/m3):	50 g/m <sup>3</sup>	ASTM E-1515
Autoignition Temperature:		No information available
Minimum Ignition Temperature:	480 - 500°C	ASTM E-1491
Minimum Ignition Energy:	> 500 mJ	ASTM E-2019 and IEC 61241-2-3
Ignition Energy:		No information available
Maximum Absolute Explosion Pressure:	7.9 bar	ASTM E-1226
Maximum Rate of Pressure Rise:	415 bar/sec	ASTM E-1226
Burn Velocity:		No information available
Kst Value:	113	ASTM E-1226
bar.meter/second		
Dust Explosion Classification:	ST1	

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage, and transport. Contact or mixture with oxidizing agent such as nitric acid may cause ignition or explosion. May react exothermically upon contact with strong oxidizers.
<b>Chemical stability</b>	This product is stable under normal conditions of storage, shipment, and use. Avoid storing at high temperatures or in direct sunlight. Do not store above 24°C.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials. Avoid dust formation. Activated carbon (especially when wet) can deplete oxygen from air in enclosed spaces, and dangerously low levels of oxygen may result.
<b>Incompatible materials</b>	Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. may result in rapid combustion.
<b>Explosion data</b>	See also Section 9.
<b>Sensitivity to Mechanical Impact</b>	None.

<b>Sensitivity to Static Discharge</b>	Dust may form an explosive mixture in air. Do not create a dust cloud by using a brush or compressed air.
<b>Hazardous decomposition products</b>	Used activated carbon may produce additional combustion products which are based on the substance(s) adsorbed. Materials allowed to smolder for long periods in enclosed spaces may produce amounts of carbon monoxide which reach the lower explosive limit (carbon monoxide LEL = 12.5% in air). Carbon oxides.
<b>Cautions</b>	High concentrations of organics in air will cause temperature rise due to heat of adsorption. At very high concentration levels this may result in a thermal excursion, referred to as a bed fire. High concentrations of Ketones and Aldehydes may cause a rise in bed temperature due to adsorption and oxidation.

## 11. TOXICOLOGICAL INFORMATION

Information given is based on data obtained from this substance or from similar substances.

**Acute toxicity** Not classified.

<b>Oral LD50:</b>	LD50/oral/rat = >2000 mg/kg. (OECD 423).
<b>Inhalation LC50:</b>	LC50/inhalation/1h/rat = >8.5 mg/L (OECD 403)
<b>Dermal LD50:</b>	Absorption highly unlikely, no health effects known.
<b>Skin corrosion/irritation:</b>	Not classified Skin irritation test, rabbit (OECD 404): Not irritating.
<b>Serious eye damage/eye irritation:</b>	Not classified. Eye irritation test, rabbit (OECD 405): Not irritating.
<b>Sensitization:</b> Assay (OECD 429).	Not classified. Not sensitizing based on Local Lymph Node
<b>Mutagenicity:</b>	Not classified. - Gene mutation in bacteria (Bacterial Reverse Mutation Assay/Ames) (OECD 471): not mutagenic. - In vitro Mammalian Chromosome Aberration Test (OECD 473): not clastogenic. - In vitro Mammalian Cell Gene Mutation Test (OECD 476): non-mutagenic.
<b>Reproductive Toxicity:</b>	Not classified. Repeated dose inhalation toxicity test showed no reproductive target organ effects, and a toxicokinetic study showed no product migration to reproductive organs.
<b>STOT - single exposure:</b>	Not Classified
<b>STOT – repeated exposure:</b>	Not classified. Repeated dose toxicity study, inhalation (rat) 90 days (OECD 413): NOAEC 7.29 mg/m <sup>3</sup> (respirable). This test was conducted on activated carbon containing negligible

crystalline silica; therefore, activated carbon itself is not classified for STOT-RE. Although respirable crystalline silica is classified as STOT-RE1, this product contains <1% respirable crystalline silica, therefore it is not classified for STOT-RE.

**Aspiration Hazard:** Based on industrial experience and available data, no aspiration hazard is expected.

**Carcinogenicity:** Not classified.

Contains a component (crystalline silica) that is listed by IARC as group 1, by ACGIH as group A2, and by NTP as a known human carcinogen.

## 12. ECOLOGICAL INFORMATION

Information given is based on data obtained from this substance or from similar substances.

**Aquatic Toxicity:** Nontoxic. The substance is highly insoluble in water and the substance is unlikely to cross biological membranes. No adverse ecological effects are known.

**Terrestrial Toxicity:** Earthworm reproduction study (OECD 222), NOAEC for body weight reduction 1,000 mg/kg soil; NOAEC for reproduction 3,200 mg/kg soil. Nontoxic in soil.

### Environmental Fate

<b>Persistence and degradability</b>	Not expected to degrade
<b>Bioaccumulation</b>	Not expected due to physicochemical properties of the substance.
<b>Mobility</b>	Not expected to migrate. Insoluble.
<b>Distribution to Environmental Compartments</b>	Insoluble. Expected to remain on soil surface.

## 13. DISPOSAL CONSIDERATIONS

Disclaimer: Information in this section pertains to the product as shipped in its intended composition as described in Section 3 of this SDS. Contamination or processing may change waste characteristics and requirements. Regulations may also apply to empty containers, liners or rinsate. State/provincial and local regulations may be different from federal regulations.

**RCRA:** Unused product is not a hazardous waste under U.S. RCRA, 40 CFR 261. Spent (used) product may be hazardous based on the substance adsorbed.

**Waste Disposal Methods**                      Activated carbon, in its original state, is not a hazardous material or hazardous waste. Follow applicable regulations for waste disposal.

Spent (used) activated carbon may be classified as a hazardous waste depending upon its use, the substance(s) adsorbed, and how it is ultimately managed. Follow applicable regulations for disposal.

Recycling (reactivation) may be a viable alternative to disposal. Dust formation from residues in packaging should be avoided and suitable worker protection assured. Store used packaging in enclosed receptacles.

#### Disposal of Contaminated Packaging

Dispose according to federal, state, and local laws. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Authority.

### 14. TRANSPORTATION INFORMATION

#### U.S. (D.O.T.)

Proper Shipping Name:	Chemicals not otherwise indexed (NOI) nonhazardous.
Hazard Class:	Not applicable
UN/NA:	Not applicable
Labels:	Not applicable
Shipping Class	70
Freight Classification	STCC Code - #2899643 / NMFC #40560

#### Canada (T.D.G.)

Proper Shipping Name:	Chemicals not otherwise indexed (NOI) nonhazardous.
Hazard Class:	Not applicable
UN/NA:	Not applicable
Labels	Not applicable

#### IMDG

Proper Shipping Name:	Chemicals not otherwise indexed (NOI) nonhazardous.
Hazard Class:	Not applicable
UN/NA:	Not applicable
Labels:	Not applicable

#### IATA

Proper Shipping Name:	Chemicals not otherwise indexed (NOI) nonhazardous.
Hazard Class:	Not applicable
UN/NA:	Not applicable
Labels:	Not applicable

### 15. REGULATORY INFORMATION

#### **Hazard Classification**

**United States - OSHA (29 CFR 1910.1200):** Not Regulated

**Canada - WHMIS Classification (CPR, SOR/88-66):** Not controlled.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the M/SDS contains all the information required by the Controlled Products Regulations.

**CERCLA/SUPERFUND (40CFR117, 302):** Contains no CERCLA hazardous substances. Notification of spills of this material is not required. Specific reporting requirements at the local, regional, or state level pertaining to releases of this material may exist.

**RCRA (40CFR261.33, 261.20-24):** This product, in its original state, does not meet the criteria of hazardous waste.

**Toxic Substances Control Act (40CFR710):** Activated carbon does not contain any relevant components.

**California Prop. 65:** Product and impregnate component are not listed.

**Section 302** - Extremely Hazardous Substances (40CFR355): This product is not listed as an extremely hazardous substance.

**Section 313-List of toxic Chemicals:** This product is not listed.

Chemical name	WHMIS - Ingredient Disclosure
Quartz (respirable) 14808-60-7	1

### **International Inventories**

<b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory	Complies
<b>DSL/NDL</b> - Canadian Domestic Substances List/Non-Domestic Substances List	Complies
<b>EINECS/ELINCS</b> - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances	Complies
<b>ENCS</b> - Japan Existing and New Chemical Substances	Complies
<b>IECSC</b> - China Inventory of Existing Chemical Substances	Complies
<b>KECL</b> - Korean Existing and Evaluated Chemical Substances	Complies
<b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances	Complies
<b>AICS</b> - Australian Inventory of Chemical Substances	Complies
<b>NZIoC</b> - New Zealand Inventory of Chemicals	Complies
<b>TCSI</b> - Taiwan Chemical Substance Inventory	Complies

### **US Federal Regulations**

#### **TSCA Section 12(b) Export Regulations:**

This product does not contain any components that are subject to TSCA 12(b) Export Notification

#### **SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	NO
<b>Chronic Health Hazard</b>	NO
<b>Fire hazard</b>	NO
<b>Sudden release of pressure hazard</b>	NO
<b>Reactive Hazard</b>	NO

#### **Clean Air Act Amendments of 1990**

##### **(CAA, Section 112, 40 CFR 82):**

Activated carbon does not contain any components listed as Hazardous Air Pollutants, Flammable Substances, Toxic Substances, or Class 1 or 2 Ozone Depletors.

##### **\WA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**Activated carbon, (CAS: 7440-44-0) is found on the following regulatory lists:**

- US EPA High Production Volume Program Chemical List
- US FDA CFSAN Color Additive Status List 4
- US FDA CFSAN Color Additive Status List 6
- US DOE Temporary Emergency Exposure Limits (TEELs)
- US - Hawaii Air Contaminant Limits
- US - Idaho - Toxic and Hazardous Substances - Mineral Dust
- US - Minnesota Hazardous Substance List
- US - Minnesota Permissible Exposure Limits (PELs)
- US - Rhode Island Hazardous Substance List
- US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants US -

Washington Permissible exposure limits of air contaminants  
 Canada - British Columbia Occupational Exposure Limits  
 Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances Canada Domestic Substances List (DSL) International Air Transport Association (IATA) Dangerous Goods Regulations  
 OECD Representative List of High Production Volume (HPV) Chemicals

**CANADIAN CLASSIFICATION**

WHMIS (CPR, SOR/88-66): Products and impregnant components are no listed.

DSL #: Products and impregnant components are no listed.

EEC Council Directives relating to the classification, packaging, and labeling of dangerous substances and preparations.

Risk and Safety Phrases  
 R36: Irritating to the eyes.  
 R37: Irritating to the respiratory system.  
 R38: Irritating to the skin.

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Quartz (respirable) 14808-60-7 (<10)	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Quartz (respirable) 14808-60-7	X	X	X

**16. OTHER INFORMATION**

**Disclaimer:** The information contained in this Safety Data Sheet (SDS), as of the issue date, is believed to be true and correct. However, the accuracy or completeness of this information and any recommendations or suggestions are made without warranty, express or implied, or guarantee. Tersus Environmental, LLC urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. Since we cannot control the application, use or processing of the product, we do not accept responsibility. Therefore, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product and ensure that the intended use of the product will not infringe any party's intellectual property right. The information presented here pertains only to the product as shipped.

All recommendations for the use of our products, whether given by us, orally or to be implied from data or lab tests results by us, are based on the current state of our knowledge at the time those recommendations are made. When additional information is obtained, these recommendations may be updated. They may also be influenced by circumstances outside our control. Notwithstanding such

recommendation the user is responsible for ensuring that the product supplied by us is suitable for the process or purpose he/she intends to use it.

Due to the proliferation of sources for information such as manufacturer specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.



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**End of Safety Data Sheet**