

**MATERIAL SAFETY DATA SHEET**

**SECTION 1 - IDENTIFICATION**

**Product identifier** : **CHARSIL™**

**Product Code(s)** : None reported.

**Product Use** : Rice hull char

**Chemical Family** : Mixture.

**Supplier's name and address:**

**Riceland Foods, Inc.**

PO Box 927  
2120 South Park  
Stuttgart, AR, USA  
72160

**Manufacturer's name and address:**

Refer to Supplier

**Information Telephone #** : 870-673-5314

**24 Hr. Emergency Tel #** : 870-673-5314

**SECTION 2 - HAZARDS IDENTIFICATION**

**Classification** : This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).  
Hazardous classification:  
Acute Health Hazard  
Chronic Health Hazard

This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). WHMIS classification:

Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material)

Class D2B (Materials Causing Other Toxic Effects, Toxic Material)

**Emergency Overview** : Black granular material. Slightly burnt odour.

Caution! Causes eye, skin and respiratory irritation. May cause gastrointestinal irritation. Contains material which can cause lung damage. May be mutagenic. Contains material which can cause cancer.

**POTENTIAL HEALTH EFFECTS:**

**Signs and symptoms of short-term (acute) exposure**

*Inhalation* : May cause irritation to the nose, throat and upper respiratory tract. Symptoms may include coughing, chest pain and shortness of breath.

*Skin* : Prolonged skin contact may cause skin irritation.

*Eyes* : Inert particles may cause mechanical irritation of the eyes, including scratches.

*Ingestion* : May cause nausea, vomiting, and diarrhea.

**Effects of long-term (chronic) exposure**

: Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin.

Contains crystalline silica; prolonged exposure by inhalation of particles can cause serious lung damage, including silicosis.

**Carcinogenic status** : Possible cancer hazard. See TOXICOLOGICAL INFORMATION, Section 11.

**Additional health hazards** : Possible mutagen. See TOXICOLOGICAL INFORMATION, Section 11.

**Potential environmental effects**

: See ECOLOGICAL INFORMATION (Section 12).

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Ingredients</u>	<u>CAS #</u>	<u>Wt.%</u>
Silica, crystalline, cristobalite	14464-46-1	10.00 - 30.00
Amorphous silica	7631-86-9	40.00 - 70.00

Carbon black	1333-86-4	15.00 - 40.00
Calcium oxide	1305-78-8	0.10 - 1.00
Magnesium oxide	1309-48-4	0.10 - 1.00
Manganese oxide	1317-34-6	0.10 - 1.00

**SECTION 4 - FIRST AID MEASURES**

- Inhalation** : If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. Seek immediate medical attention/advice.
- Skin contact** : Immediately flush skin with running water for at least 15 minutes, while removing contaminated clothing. Consult a physician. Wash contaminated clothing before re-use.
- Eye contact** : Immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention/advice.
- Ingestion** : Seek immediate medical attention/advice. Do not induce vomiting. Never give anything by mouth to an unconscious person.
- Notes For Physician** : Treat symptomatically.

**SECTION 5 - FIRE FIGHTING MEASURES**

- Fire hazards/conditions of flammability** : Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.
- Flammability classification (OSHA 29 CFR 1910.1200)** : Not flammable.
- Oxidizing properties** : None.
- Explosion data: Sensitivity to mechanical impact / static discharge** : Not expected to be sensitive to mechanical impact or static discharge.
- Suitable extinguishing media** : Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical. Do not use a solid water stream as it may scatter and spread fire.
- Special fire-fighting procedures/equipment** : Fight fires from a safe distance. Firefighters should wear proper protective equipment and self contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Product may smolder, which may not be readily detectable. Large piles must be disturbed to insure smoldering material is extinguished.
- Hazardous combustion products** : Carbon oxides and other irritating fumes and smoke.
- NFPA Rating** : 0 - Minimal    1 - Slight    2 - Moderate    3 - Serious    4 - Severe  
 : *Health:* 2    *Flammability:* 1    *Instability:* 0    *Special Hazards:* None

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

- Personal precautions** : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Individuals involved in the cleanup must wear appropriate personal protective equipment. For personal protection see section 8.
- Environmental precautions** : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.
- Spill response/cleanup** : Remove all sources of ignition. Ventilate area of release. Stop the spill at source if it is safe to do so. Sweep up and shovel into suitable containers for disposal. Use methods that do not generate dusts. Notify the appropriate authorities as required.
- Prohibited materials** : None known.
- Special spill response procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).  
 US CERCLA Reportable quantity (RQ): None.

**SECTION 7 - HANDLING AND STORAGE**

- Safe Handling procedures** : Use only in well-ventilated areas. Do not ingest. Avoid breathing dust. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep away from heat, sparks, and open flames. Avoid contact with incompatible materials. Keep container tightly closed when not in use.

- Storage requirements** : Store in a cool, dry, well-ventilated area. Store away from incompatible materials. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.
- Incompatible materials** : Strong oxidizing agents and acids.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**

<u>Exposure Limits</u>				
<u>Ingredients</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Silica, crystalline, cristobalite	0.025 mg/m <sup>3</sup> (respirable fraction)	N/Av	(10 mg/m <sup>3</sup> / 2 + %SiO <sub>2</sub> ) / 2 (respirable fraction)	N/Av
Amorphous silica	3 mg/m <sup>3</sup> (respirable particles)	N/Av	N/Av	N/Av
Carbon black	3.5 mg/m <sup>3</sup>	N/Av	3.5 mg/m <sup>3</sup>	N/Av
Calcium oxide	2 mg/m <sup>3</sup>	N/Av	5 mg/m <sup>3</sup>	N/Av
Magnesium oxide	10 mg/m <sup>3</sup> (inhalable fraction)	N/Av	15 mg/m <sup>3</sup> (total particulate)	N/Av
Manganese oxide	0.2 mg/m <sup>3</sup> (as Mn)	N/Av	N/Av	N/Av

- Ventilation and engineering measures** : Ensure adequate ventilation, especially in confined areas. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.
- Respiratory protection** : Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. Advice should be sought from respiratory protection specialists.
- Skin protection** : Gloves impervious to the material are recommended. Advice should be sought from glove suppliers.
- Eye / face protection** : Safety goggles or glasses as appropriate for the job.
- Other protective equipment** : Wear resistant clothing and boots. An eyewash station and safety shower should be made available in the immediate working area.
- General hygiene considerations** : Avoid breathing dust. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- |  |  |
|--|--|
| <b>Physical state</b> : solid                        | <b>Appearance</b> : Black granular material.         |
| <b>Odour</b> : Slightly burnt odour.                 | <b>Odour threshold</b> : N/Av                        |
| <b>pH</b> : 10 (as aqueous solution)                 |  |
| <b>Boiling point</b> : N/Av                          | <b>Specific gravity</b> : N/Av                       |
| <b>Melting/Freezing point</b> : N/Av                 | <b>Coefficient of water/oil distribution</b> : N/Av  |
| <b>Vapour pressure (mmHg @ 20° C / 68° F)</b> : N/Av | <b>Solubility in water</b> : slight                  |
| <b>Vapour density (Air = 1)</b> : N/Av               | <b>Evaporation rate (n-Butyl acetate = 1)</b> : N/Av |
| <b>Volatile organic Compounds (VOC's)</b> : N/Av     | <b>Volatiles (% by weight)</b> : N/Av                |
| <b>Flash point</b> : Non-flammable.                  |  |
| <b>Flash point Method</b> : N/Av                     | <b>Auto-ignition temperature</b> : N/Av              |
| <b>Lower flammable limit (% by vol.)</b> : N/Av      | <b>Upper flammable limit (% by vol.)</b> : N/Av      |
| <b>Flame Projection Length</b> : N/Av                | <b>Flashback observed</b> : N/Av                     |

**Section 10: Stability And Reactivity**

- Stability and reactivity** : Stable under the recommended storage and handling conditions prescribed.
- Hazardous polymerization** : Hazardous polymerisation does not occur.
- Conditions to avoid** : Avoid contact with incompatible materials. Avoid dust formation.
- Materials To Avoid And Incompatibility** : Incompatible materials (see Section 7).
- Hazardous decomposition products** : None known, refer to hazardous combustion products in Section 5.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

- Target organs** : Eyes, skin, respiratory system and digestive system.
- Routes of exposure** : *Inhalation:* YES *Skin Absorption:* NO *Skin & Eyes:* YES *Ingestion:* YES
- Toxicological data** : See below for individual ingredient acute toxicity data.

<u>Ingredients</u>	<u>LC<sub>50</sub>(4hr)</u>		<u>LD<sub>50</sub></u>	
	<u>inh, rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>	
Silica, crystalline, cristobalite	N/Av	N/Av	N/Av	
Amorphous silica	N/Av	3160 mg/kg	N/Av	
Carbon black	6750 mg/m <sup>3</sup>	>15400 mg/kg	>3000 mg/kg	
Calcium oxide	N/Av	N/Av	N/Av	
Magnesium oxide	N/Av	N/Av	N/Av	
Manganese oxide	N/Av	N/Av	N/Av	

- Carcinogenic status** : This product contains Crystalline silica - Quartz. Crystalline silica - Quartz is classified as carcinogenic by IARC (Group 1), ACGIH (Group A2), NTP (Group 1) and OSHA (OSHA Select carcinogen).  
This product contains Carbon black, an IARC Group 2B carcinogen.
- Reproductive effects** : Not expected to have other reproductive effects.
- Teratogenicity** : Not expected to be a teratogen.
- Mutagenicity** : Contains Carbon black. Carbon black is suspected of causing mutations in non-reproductive cells, based on animal data.
- Epidemiology** : Not available.
- Sensitization to material** : Not expected to be a skin or respiratory sensitizer.
- Synergistic materials** : Not available.
- Irritancy** : Eyes, skin, respiratory system and digestive system.
- other important hazards** : See Section 3 for additional information.
- Conditions aggravated by overexposure** : Pre-existing skin, eye and respiratory disorders.

**SECTION 12 - ECOLOGICAL INFORMATION**

- Ecotoxicity** : No data is available on the product itself.
- Mobility** : No data is available on the product itself.
- Persistence** : No data is available on the product itself.
- Bioaccumulation potential** : No data is available on the product itself.
- Other Adverse Environmental effects** : The ecological characteristics of this product have not been fully investigated. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

- Handling for Disposal** : See Section 7 (Handling and Storage) for further details.
- Methods of Disposal** : Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

**RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method.

**SECTION 14: TRANSPORT INFORMATION**

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
49CFR/DOT	None	Not regulated.	Not regulated	none	
<b>49CFR/DOT Additional information</b>	None.				
TDG	None	Not regulated.	Not regulated	none	
<b>TDG Additional information</b>	None.				

**SECTION 15 - REGULATORY INFORMATION**

**US Federal Information:**

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): See Section 6

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Immediate (Acute) health hazard; Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

**US State Right to Know Laws:**

California Proposition 65: This product contains a chemical known to the State of California to cause cancer. This product contains: Crystalline silica, quartz; Carbon black (Carbon black is listed when found in unbound, airborne particles of respirable size.)

**International Information:**

This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Controlled Products Regulations (CPR). Refer to Section 1 for a WHMIS Classification for this product.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

**This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.**

**SECTION 16 - OTHER INFORMATION**


**HMIS Rating** : \* - Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe  
*Health: \*2                      Flammability: 1                      Reactivity: 0*

**Legend** : ACGIH: American Conference of Governmental Industrial Hygienists  
 CA: California  
 CAS: Chemical Abstract Services  
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980  
 CFR: Code of Federal Regulations  
 DOT: Department of Transportation

EPA: Environmental Protection Agency  
 HMIS: Hazardous Materials Identification System  
 HSDB: Hazardous Substances Data Bank  
 IARC: International Agency for Research on Cancer  
 Inh: Inhalation  
 LC: Lethal Concentration  
 LD: Lethal Dose  
 MA: Massachusetts  
 MN: Minnesota  
 MSHA: Mine Safety and Health Administration  
 MST: Mountain Standard Time  
 N/Ap: not applicable  
 N/Av: not available  
 NFPA: National Fire Protection Association  
 NIOSH: National Institute of Occupational Safety and Health  
 NJ: New Jersey  
 NTP: National Toxicology Program  
 OSHA: Occupational Safety and Health Administration  
 PA: Pennsylvania  
 PEL: Permissible exposure limit  
 RCRA: Resource Conservation and Recovery Act  
 RI: Rhode Island  
 RTECS: Registry of Toxic Effects of Chemical Substances  
 SARA: Superfund Amendments & Reauthorization Act  
 STEL: Short Term Exposure Limit  
 TCC: Tagliabue Closed Cup  
 TDG: Canadian Transportation of Dangerous Goods Act & Regulations  
 TLV: Threshold Limit Values  
 TSCA: Toxic Substance Control Act  
 TWA: Time Weighted Average  
 WHMIS: Workplace Hazardous Materials Identification System

**References**

- : 1. ACGIH, Threshold Limit Values and Biological Exposure Indices
- 2. International Agency for Research on Cancer Monographs
- 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases (Chempendium, HSDB and RTECs).
- 4. Material Safety Data Sheets from manufacturer.
- 5. US EPA Title III List of Lists
- 6. California Proposition 65 List

<p><b>Prepared for:</b>                  Riceland Food Inc.                  PO Box 927 - 2120 South Park                  Stuttgart, AR, USA 72160                  Telephone: 870-673-5314                  Direct all enquiries to: Riceland Foods Inc</p>	
<p><b>Prepared by:</b>                  ICC The Compliance Center Inc.  <a href="http://www.thecompliancecenter.com">http://www.thecompliancecenter.com</a></p>	

**DISCLAIMER OF LIABILITY**

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**Revision Information** : Sections 2 and 3, switched.  
2. HAZARDS IDENTIFICATION  
3. COMPOSITION/INFORMATION ON INGREDIENTS  
5. FIRE-FIGHTING MEASURES

**END OF DOCUMENT**