

# Material Safety Data Sheet

## Birm

Last Update: May 1, 2013

### 1. CHEMICAL PROPERTIES AND COMPANY IDENTIFICATION

Product Name: BIRM  
General Use: Filter media  
Product Description: Brown to black granular powder

Company Identification: Northern Filter Media  
2509 Pettibone Ave.; Muscatine, IA 52761  
(563) 263-2711 (product information)  
(800) 255-3924 (emergencies)

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Hazardous Components</u>	<u>CAS#</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Silica, crystalline quartz (a)(b)	14808-60-7	40-70	.1	.05
Aluminum silicate	12141-46-7	15-40	15	10
Manganese dioxide (c)	1313-13-9	7-15	5	.2

- (a) California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986, chemicals known to the state to cause cancer or reproductive toxicity. A person in the course of doing business must warn others who may consume, come in contact with, or otherwise be exposed to this chemical.
- (b) Indicates substance appears on National Toxicology Program (NTP) list of carcinogens. International Agency for Research on Cancer (IARC) list of carcinogens or is regulated by the OSHA as a possible carcinogen.
- (c) See Section 15

### 3. HAZARD IDENTIFICATION

**Emergency Overview:** Granulated powder, airborne dust particles are harmful and irritating to respiratory tract. Contact with eyes may cause irritation. Silica crystalline quartz indicates carcinogenic classification – NTP: anticipated carcinogen, IARC Monographs: Group 1. “Carcinogenic to Humans”. Hazard symbols: Xn. Risk Phrases: R20. 36/37. 40.

**Potential Health Effects:**

**INHALATION:** May cause breathlessness, wheezing, coughing and sputum production.

Pulmonary function may be reduced by inhalation of respirable crystalline silica.

**SKIN:** None expected, however prolonged contact may cause irritation.

**EYES:** Contact may cause irritation.

**INGESTION:** May cause gastric distress, stomach pains, vomiting and diarrhea.

**CARCINOGENICITY:** Silica crystalline quartz indicates carcinogenic classification – NTP: anticipated carcinogen, IARC Monographs: Group 1. “Carcinogenic to Humans”.

### 4. FIRST AID MEASURES

**INHALATION:** Remove affected person to fresh air. If symptoms persist seek medical attention.

**SKIN:** Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse. If irritation persists seek medical attention.

**EYES:** Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open. If irritation persists seek medical attention.

**INGESTION:** Give two glasses of water for dilution. Do not induce vomiting; seek medical attention.

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### 5. FIRE FIGHTING MEASURES

Flash Point: Non-flammable

Flammable Limits: LEL: Not applicable UEL: Not applicable

Auto-Ignition Temperature: Not determined

NFPA Class: None

**GENERAL HAZARDS:** Product is not considered flammable or combustible. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

**EXTINGUISHING MEDIA:** Carbon dioxide, water, water fog, dry chemical, chemical foam.

**FIRE FIGHTING PROCEDURES:** None

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None

**HAZARDOUS COMBUSTION PRODUCTS:** Smoke, fumes, oxides of carbon

### 6. ENVIRONMENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Small spills – wash to sanitary sewer with plenty of water. Large spills – recover and segregate product for reuse; shovel product into approved container for disposal

### 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Keep container closed when not in use; protect containers from abuse; store containers in cool, dry area. Keep this and other chemicals out of reach of children.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** The use of local exhaust ventilation and airborne collection is recommended. No other special controls are indicated.

**PERSONAL PROTECTION:**

**RESPIRATORY PROTECTION (SPECIFY TYPE):** NIOSH approval respirator with HEPA cartridge designed to remove airborne particulates present in excess of maximum allowable concentrations due to operations such as mixing, spraying, sanding, buffing, etc. Refer to CFR 1910.134 for regulations.

**PROTECTIVE GLOVES:** Neoprene or rubber gloves.

**EYE PROTECTION:** Safety goggles with side shields.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Safety eyebath nearby.

**WORK /HYGIENIC PRACTICES:** Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

### 9. PHYSICAL AND CHEMICAL PROTECTION

**VAPOR PRESSURE:** Not applicable

**VAPOR DENSITY (AIR = 1):** Not applicable

**SPECIFIC GRAVITY (WATER = 1):** 2.0 – 2.5

**EVAPORATION POINT (n-Butyl Acetate = 1):** Not applicable

**SOLUBILITY IN WATER:** Insoluble

**FREEZING POINT:** Not applicable

**pH:** Not applicable

**APPEARANCE AND ODOR:** Brown to black granular powder, no odor

**BOILING POINT: \*(F) (\*C)**

**PHYSICAL STATE:** Granulated powder

**VISCOSITY:** Not applicable

**VOLATILE ORGANIC COMPOUNDS (Total VOC's):** Not applicable

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### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Store in cool dry area

**INCOMPATIBILITY (MATERIALS TO AVOID):** Can react with strong reducing agents and release soluble manganese; dissolves in hydrofluoric acid to produce corrosive gas – silicone tetrafluoride.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:** Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, fumes and smoke may be produced.

**HAZARDOUS POLYMERIZATION:** Will not occur

Conditions to avoid: None

### 11. TOXICOLOGICAL INFORMATION

<u>Hazardous Ingredients</u>	<u>Silica</u>	<u>Alum Silicate</u>	<u>Manganese dioxide</u>
CAS#	14808-60-7	12141-46-7	1313-13-9
EINECS#	238-878-4	235-253-8	215-202-6
LD50 of ingredients	Not established	Not established	Not established
LC50 of ingredients	Not established	Not established	Not established

### 12. ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in the mixture are classified as a Marine Pollutant.

### 13. DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Dispose of in accordance with Local, State and Federal Regulations. Products classified as non-hazardous may become hazardous waste upon contact with other products. Refer to “40 CFR Protection of Environment Parts 260 – 299” for complete waste disposal regulations. Consult with your local, state or Federal Protection Agency before disposing of any chemicals.

### 14. TRANSPORT INFORMATION

**PROPER SHIPPING NAME:** Not Regulated

**HAZARD CLASS / PACK GROUP:** None / None

**IATA HAZARD CLASS:** None

**REFERENCE:** None

**IMDG HAZARD CLASS:** None

**IDENTIFICATION NUMBER:** None

**RIS / ADR DANGEROUS GOODS CODE:** None

**LABEL:** None

**HAZARD SYMBALS:** None

**Note:** Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 – 177, IMDG, IATA, EC and United Nations TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

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**15. OTHER INFORMATION**

Prolonged exposure to crystalline quartz may cause lung injury (silicosis). Acute or rapidly developing silicosis may occur in heavy exposure conditions.

**HMIS RATINGS:**

<b>Health:</b>	<b>1</b>	<b>0 = INSIGNIFICANT</b>	<b>3 = HIGH</b>
<b>FLAMMABILITY:</b>	<b>0</b>	<b>1 = SLIGHT</b>	<b>4 = EXTREME</b>
<b>REACTIVITY:</b>	<b>0</b>	<b>2 = MODERATE</b>	

**PERSONAL PROTECTIVE EQUIP:** E (Safety glasses, gloves, dust respirator)

**REVISION SUMMARY:** This MSDS has been revised in the following sections:

**Risk and Safety Phrases**

**MSDS Prepared By:** Chem-Tel, Inc.  
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