

Material SafetyData Sheet Last Update: May 1,2013 Birm

1. CHEMICAL PROPERTIESAND 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

Hazardous Components	CAS#	<u>%</u>	OSHA PEL	ACGIH TLV
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 quart 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.

CARCENOGENICITY: Silica crystalline quart 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 ANDSTORAGE

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 wellas 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

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

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

Hazardous Ingredients	<u>Silica</u>	Alum Silicate	Manganese dioxide
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

IMGD 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:

Health: 1 0 = INSIGNIFICANT 3 = HIGH FLAMMABILITY: 0 1 = SLIGHT 4 = EXTREME

REACTIVITY: 0 2 = MODERATE

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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