

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BIRM

GENERAL USE: Filter media

PRODUCT DESCRIPTION: Brown to black granular powder



MANUFACTURER'S NAME

Clack Corporation

TELEPHONE NUMBER FOR INFORMATION

(608) 846-3010

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ADDRESS (NUMBER, STREET, P.O. BOX)

4462 Duraform Lane

EMERGENCY TELEPHONE NUMBER

CHEM • TEL (800) 255-3924 Outside USA (813) 248-0573

(CITY, STATE AND ZIP CODE)

Windsor, WI 53598-

COUNTRY

USA

DATE PREPARED: February 5, 2004

SUPERSEDES: May 6, 2002

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS #	% (by weight)	OSHA PEL		ACGIH TWA		SARA TITLE III	RQ LBS
			PPM	MG/M3	PPM	MG/M3		
Silica, crystalline, quartz (a,b)	14808-60-7	40 - 70		0.1		0.05		
Aluminum silicate (mineral dust)	12141-46-7	15 - 40		15		10		
Manganese dioxide (c)	1313-13-9	7 - 15		5		0.2	Yes	

(c) See Section 15

(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 into 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 Occupational Safety and Health Administration (OSHA) as a possible carcinogen.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Granular 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, cough 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 with eyes may cause irritation.

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

CARCINOGENICITY

NTP? Yes

IARC MONOGRAPHS? Yes

OSHA REGULATED? No

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SECTION 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.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED) Non-flammable	FLAMMABLE LIMITS	LEL: Not applicable	UEL: Not applicable
	AUTOIGNITION 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

SECTION 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.

SECTION 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.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTR0LS

The use of local exhaust ventilation and airborne particle collection is recommended. No other special controls are indicated.

PERSONAL PROTECTION:

RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSH approved respirator with HEPA cartridge designed to remove airborne particulate present in excess of maximum allowable concentrations due to operations such as mixing, spraying, sanding, buffing, etc. Refer to 29 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.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE (MM Hg) Not applicable	VAPOR DENSITY (AIR = 1) Not applicable
SPECIFIC GRAVITY (WATER = 1) 2.0 -- 2.5	EVAPORATION RATE (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

SECTION 10 - STABILITY AND REACTIVITY

STABILITY UNSTABLE: STABLE: XXX	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, hydrocarbons, fumes, and smoke may be produced.	
HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: XXX	CONDITIONS TO AVOID: None

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Silica, Crystalline Quartz	14808-60-7	238-878-4	Not established	Not established
Aluminum silicate	12141-46-7	235-253-8	Not established	Not established
Manganese dioxide	1313-13-9	215-202-6	Not established	Not established

SECTION 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 this mixture are classified as a Marine Pollutant.

SECTION 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 your local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not Regulated	IATA HAZARD CLASS / Pack Group: None
HAZARD CLASS / Pack Group: None / None	IMDG HAZARD CLASS: None
REFERENCE: Not Applicable	RID/ADR Dangerous Goods Code: None
IDENTIFICATION NUMBER: None	HAZARD SYMBOLS: None
LABEL: None Required	

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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SECTION 15 - REGULATORY INFORMATION

TSCA (Toxic substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories
None

313 Reportable Ingredients:

(c) A "YES" in the SARA TITLE III column in Section 2 indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CERCLA (Comprehensive Response Compensation and Liability Act)

None

CPR (Canadian Controlled Products Regulations)

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

IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL and may or may not be listed in Section 2 of this document. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

EC Risk Phrases

R20 Harmful by inhalation.
R36/37 Irritating to eyes and respiratory system.
R40 Limited evidence of a carcinogenic effect.

EC Safety Phrases

S22 Do not breathe dust.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36 Wear suitable protective clothing.

SECTION 16 - OTHER INFORMATION

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

HMIS HAZARD RATINGS

HEALTH	1	0 = INSIGNIFICANT	3 = HIGH
FLAMMABILITY	0	1 = SLIGHT	4 = EXTREME
REACTIVITY	0	2 = MODERATE	

PERSONAL PROTECTIVE EQUIPMENT 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.
1305 N. Florida Ave.
Tampa, Florida USA 33602
(800) 255-3924 Outside USA (813) 248-0573

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.