MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BIRM GENERAL USE: Filter media

PRODUCT DESCRIPTION: Brown to black granular powder



DATE PREPARED: November 13, 2006 Page 1 of 4
SUPERSEDES: February 5, 2004
TELEPHONE NUMBER FOR INFORMATION
(608) 846-3010
RY EMERGENCY TELEPHONE NUMBER
CHEM • TEL (800) 255-3924 Outside USA (813) 248-0585
TELEPHONE NUMBER FOR INFORMATION
RY EMERGENCY TELEPHONE NUMBER

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	040#	% OSHA PEL		A PEL	ACGIH TWA		SARA	RQ
	CAS#	(by weight)	PPM	MG/M3	PPM	MG/M3	TITLE III	LBS
Silica, crystalline, quartz (a,b)	14808-60-7	40 - 70		0.1		0.05		
Manganese dioxide (c,d)	1313-13-9	7 - 15		5 C		0.2	Yes	
Aluminum silicate (mineral dust)	12141-46-7	15 - 40	***************************************	15		10		

(c) See Section 15

- (a) 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.
- (b) 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.
- (d) A "C" in the OSHA PEL or ACGIH TWA column indicates ceiling limits, the concentration that should not be exceeded during any part of the working exposure.

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: Xi. Risk Phrases: R 20, 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.. Contains substances which are considered nuisance dusts which require a NIOSH approved respirator when airborne particulate exceeds maximum allowable limit.

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
Silica, crystalline quartz indicates carcinogenic classification - NTP: Anticipated Carcinogen, IARC Monographs: Group 1, "Carcinogenic to Humans".

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SECTION 4 - FIRST AID MEASURES

INHALATION: Remove affected person to fresh air; if symptoms persist seek medical attention.

SKIN: Wash contacted area with soap and water; if irritation persists, seek medical attention.

EYES: Check for and 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; never give anything by mouth to an unconscious person; seek medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED)

FLAMMABLE LIMITS

LEL: Not applicable

UEL: Not applicable

Non-flammable

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 or vapors, oxides of carbon.

SECTION 6 - ACCIDENTAL 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 CONTROLS

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

PERSONAL PROTECTION:

RESPIRATORY PROTECTION: NIOSH approved respirator designed to remove airborne particulate present in excess of maximum allowable concentrations due to secondary operations such as mixing, spraying, sanding, buffing, etc. Refer to 29 CFR 1910.134 or European Standard EN 149 for regulations.

PROTECTIVE GLOVES: Neoprene or nitrile rubber gloves.

EYE PROTECTION: Chemical splash goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety eyewash station nearby.

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

MATERIAL SAFETY DATA SHEET PRODUCT NAME: BIRM Page 3 of 4 November 13, 2006 SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES VAPOR DENSITY (AIR = 1) VAPOR PRESSURE (MM Hg) Not applicable Not applicable SPECIFIC GRAVITY (WATER = 1) EVAPORATION RATE (n-Butyl Acetate = 1) 2.0 -- 2.5 Not applicable SOLUBILITY IN WATER FREEZING POINT Insoluble Not applicable APPEARANCE AND ODOR pН Brown to black granular powder, no odor Not applicable PHYSICAL STATE **BOILING POINT** Not applicable Granulated powder VOLATILE ORGANIC COMPOUNDS (Total VOC's) VISCOSITY Not applicable None SECTION 10 - STABILITY AND REACTIVITY CONDITIONS TO AVOID: Avoid generating airborne dust. STABILITY UNSTABLE: STABLE: XXX

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids.

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

HAZARDOUS POLYMERIZATION MAY OCCUR: CONDITIONS TO AVOID: None

WILL NOT OCCUR: XXX

SECTION 11 - TOXICOLOGICAL INFORMATION

SECTION TI - TOXICOLOGICAL INFORMATION									
Hazardous Ingredients	CAS#	EINECS#	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)					
Silica, crystalline, quartz (a,b)	14808-60-7	238-878-4	Not established	Not established					
Manganese dioxide (c,d)	1313-13-9	215-202-6	Not established	Not established					
Aluminum silicate (mineral dust)	12141-46-7	235-253-8	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. Product is classified as non - hazardous, however, non-hazardous materials 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: Non - Hazardous for Transport

DOT HAZARD CLASS / Pack Group: Not regulated

REFERENCE: Not Applicable

UN / NA IDENTIFICATION NUMBER: None

LABEL: None Required

HAZARD SYMBOLS: None

IATA HAZARD CLASS / Pack Group: Not regulated IMDG HAZARD CLASS: Not regulated

RID/ADR Dangerous Goods Code: Not regulated
UN TDG Class / Pack Group: Not regulated

Hazard Identification Number (HIN): None

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

MATERIAL SAFETY DATA SHEET

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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

Immediate health

313 Reportable Ingredients:

(c) 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

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

There is a chemical present (Silica, crystalline, quartz) known to the state of California to cause cancer or reproductive toxicity.

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. WHMIS Classification: D2B

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, or are otherwise in compliance with the New Substances Notification (NSN) regulations. 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.

SYMBOL(S) REQUIRED FOR LABEL

Irritant



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

Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on Information from similar products, the ingredients, technical literature, and/or professional experience.

HMIS HAZARD RATINGSHEALTH1* = Chronic Health Hazard2 = MODERATEFLAMMABILITY00 = INSIGNIFICANT3 = HIGHPHYSICAL HAZARD01 = SLIGHT4 = EXTREME

PERSONAL PROTECTIVE EQUIPMENT E Safety Glasses, Gloves, Dust Respirator

REVISION SUMMARY:

This MSDS has been revised in the following sections:

Complete format update

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.