

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER	Pre-co-Floc® PB40, PB40M, PB33, PB33C, PB100M, PB200M, PB300M, PB20, PB20M, PB900, NB10		
CHEMICAL NAME	Powdered Cellulose		
CHEMICAL FAMILY	Cellulose		
MATERIAL USE	Filter Aid		
RESTRICTION ON USE	None Known		
MANUFACTURER	EP Minerals, LLC., 9875 Gateway Dr., Reno, NV 89521		
TELEPHONE NO.	(775) 824 7600 (Monday – Friday 8:00 am PST – 5:00 pm PST)		
EMERGENCY TELEPHONE NO.	(775) 824 7600 (Monday – Friday 8:00 am PST – 5:00 pm PST)		
SDS DATE OF PREPARATION	July 31, 2014		
SECTION 2: HAZARDS	IDENTIFICATIO	N	
OSHA GHS HAZARD CLASSIFICATION	Combustible Dust		
HAZARDS NOT OTHERWISE CLASSIFIED	None		
LABEL ELEMENTS	WARNING May cause combustible dust concentrations in the air.		
INGREDIENT IDENTI	TICATION	APPROXIMATE CONCENTRATION (%)	C.A.S. NUMBERS
INGREDIENT IDENTI	ICATION		C.A.S. NUMBERS
Cellulose	100% 9004-34-6		
SECTION 4: FIRST AID	MEASURES		
EYE	Flush eyes with generous quantities of water or eye rinse solution. Consult physician if irritation persists.		
	Flush eyes with generou	is quantities of water or eye rinse solution	on. Consult physician if irritation persists.
SKIN		us quantities of water or eye rinse solutions if dryness occurs.	on. Consult physician if irritation persists.
SKIN INGESTION	Use moisture renewing I		
	Use moisture renewing I Drink generous amounts	otions if dryness occurs.	
INGESTION	Use moisture renewing I Drink generous amounts Remove to fresh air. Blo Dust may cause abrasiv	otions if dryness occurs. s of water to reduce bulk and drying effe ow nose to evacuate dust. e irritation to eyes. Prolonged skin conta	
INGESTION INHALATION Most important symptoms/effects, acute and	Use moisture renewing I Drink generous amounts Remove to fresh air. Blo Dust may cause abrasiv throat and upper respira effects.	otions if dryness occurs. s of water to reduce bulk and drying effe ow nose to evacuate dust. e irritation to eyes. Prolonged skin conta	ects. act may cause dryness. Dust may cause nose, of high concentration of dust may cause lung
INGESTION INHALATION Most important symptoms/effects, acute and delayed Indication of immediate medical attention and special treatment, if	Use moisture renewing I Drink generous amounts Remove to fresh air. Blo Dust may cause abrasiv throat and upper respira effects. Immediate medical atter	otions if dryness occurs. s of water to reduce bulk and drying effe ow nose to evacuate dust. e irritation to eyes. Prolonged skin conta tory tract irritation. Prolonged inhalation ntion is not normally required. If dust irrit	ects. act may cause dryness. Dust may cause nose, of high concentration of dust may cause lung
INGESTION INHALATION Most important symptoms/effects, acute and delayed Indication of immediate medical attention and special treatment, if necessary	Use moisture renewing I Drink generous amounts Remove to fresh air. Bid Dust may cause abrasiv throat and upper respira effects. Immediate medical atter	otions if dryness occurs. s of water to reduce bulk and drying effe ow nose to evacuate dust. e irritation to eyes. Prolonged skin conta tory tract irritation. Prolonged inhalation ntion is not normally required. If dust irrit	act may cause dryness. Dust may cause nose, of high concentration of dust may cause lung rates the eyes, seek medical attention.
INGESTION INHALATION Most important symptoms/effects, acute and delayed Indication of immediate medical attention and special treatment, if necessary SECTION 5: FIRE FIGH	Use moisture renewing I Drink generous amounts Remove to fresh air. Bla Dust may cause abrasiv throat and upper respira effects. Immediate medical atter TING MEASURES Water is most effective f Cellulose is combustible a potential fire and explo- hazard. Resuspension of	otions if dryness occurs. s of water to reduce bulk and drying effer ow nose to evacuate dust. e irritation to eyes. Prolonged skin contra tory tract irritation. Prolonged inhalation ntion is not normally required. If dust irrit 5 or ordinary combustibles such as cellulo and will burn under fire conditions. Dus psion hazard if suspended in air at high of the dust into the air by vibration, traffic	act may cause dryness. Dust may cause nose, of high concentration of dust may cause lung rates the eyes, seek medical attention.

PB20M, PB900, NB 10

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	If dust is present, use respirator fitted with particulate filter as specified in Section 8. Protect eyes with goggles.	
ENVIRONMENTAL PRECAUTIONS	This material is not a significant environmental concern.	
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	Scoop or shovel up using methods that minimize the generation of airborne dust. Nonsparking tools should be used. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentrations. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).	

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	Avoid contact with eyes. Avoid breathing dust. Repair or dispose of broken bags. Observe all label precautions and warnings. Keep product away from open flames and hot surfaces. Possible combustible dust hazard. Minimize the generation and accumulation of dust. Keep dust away from open flames, hot surfaces and sources of ignition. Follow good housekeeping practices to keep surfaces, including areas overhead such as piping, drop ceilings, ductwork, etc. free from settled dust. Dry powders can build static electricity charges when subjected to friction of transfer and in mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.
CONDITIONS FOR SAFE STORAGE	Store in a dry place to maintain packaging integrity and product quality.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

EXPOSORE GUIDELINES.				
Component	OSHA PEL	ACGIH TLV	MSHA PEL	NIOSH REL
Cellulose, wood fiber	5 mg/m ³ respirable dust 15 mg/m ³ total dust	10 mg/m ³	5 mg/m ³ respirable dust 15 mg/m ³ total dust	5 mg/m ³ respirable dust 10 mg/m ³ total dust
ENGINEERING CONTROLS	Use general or local exhaust ventil publication "Industrial Ventilation" of all dust control equipment such as this product contain explosion relie environment. Ensure that dust han equipment) are designed in a manu from the equipment). Use only app	or similar publication local exhaust venti f vents or an explose dling systems (such ner to prevent the e	ns for design of ventilation sys lation and material transport s sion suppression system or ar n as exhaust ducts, dust colle scape of dust into the work a	stems. It is recommended that ystems involved in handling n oxygen deficient ctors, vessels and processing rea (i.e. there is no leakage
PERSONAL PROTECTIVE EQUIPMENT:				
EYE / FACE PROTECTION	Goggles to protect from dust			
SKIN PROTECTION	No special equipment is needed.			
RESPIRATORY PROTECTION	Respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL) use a quarter or half-mask respirator with a N95 dust filter or a single use dust mask rated N95. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two hundred (200) times the PEL use a power air-purifying (positive pressure) respirator with a replaceable N95 filter. If dust concentration is greater than two hundred (200) times the PEL use a type C, supplied air respirator (continuous flow, positive pressure), with full face piece, hood or helmet.			
GENERAL HYGIENE	Avoid breathing dust. Avoid contact	ct with eyes. Wasl	n hands after handling and be	fore eating or drinking.
SECTION 9: PHYSICAL	AND CHEMICAL PROP	ERTIES		

APPEARANCE, COLOR	White powder	ODOR	Neutral
PHYSICAL STATE	Solid	ODOR THRESHOLD	Not applicable
VAPOR PRESSURE	Not applicable	VAPOR DENSITY	Not applicable
BOILING POINT	Not applicable	MELTING POINT	Not applicable
FLASH POINT	Not applicable	pH (10% SUSPENSION)	5.0 – 7.5 typical
FLAMMABILITY LIMITS	Not applicable	EVAPORATION RATE	Not applicable

MATERIAL NAME	Pre-co-Floc® PB40, PB40M, PB33, PB33C, PB100M, PB200M, Page 3 of 4 PB300M, PB20, PB20M, PB900, NB 10 Page 3 of 4		Page 3 of 4	
DECOMPOSITION TEMPERATURE	200° C	SPEC. GRAVITY / RELATIVE DENSITY	Variable- dependent on species and moisture 0.10 – 0.25 typical	
AUTOIGNITION TEMPERATURE	500° C	PARTITION COEFFICIENT – n- OCTANOL/WATER	Not applicable	
FLAMMABILITY (solid/gas)	Not applicable	SOLUBILITY - WATER	Insoluble	
		VISCOSITY	Not applicable	
SECTION 10: STABILIT	Y AND REACTIVITY			
REACTIVITY	Material is not reactive.			
CHEMICAL STABILITY	Material is stable.			
POSSIBILITY OF HAZARDOUS REACTIONS	Material is not reactive.			
CONDITIONS TO AVOID	Extreme heat / open flame	Extreme heat / open flame		
INCOMPATIBLE MATERIALS	None			
HAZARDOUS DECOMPOSITION PRODUCTS	Oxides of carbon			
SECTION 11: TOXICOL	OGICAL INFORMATION	1		
POTENTIAL HEALTH EFFECTS	See below and Section 11 for additional information			
Likely Routes of Exposure	See below			
EYE	May cause irritation (tear formation and redness) if dust gets in eyes.			
SKIN	Not absorbed by the skin, but may	v cause dryness if prolonged exposur	e.	
INGESTION	Ingestion of small to moderate qua and stomach.	antities is not considered harmful, bu	It may cause irritation of the mouth, throat	
INHALATION	Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation. Chronic inhalation of dust should be avoided.			
CHRONIC EFFECTS	Chronic exposure may lead to dermatitis or respiratory sensitization.			
CARCINOGENICITY	Not listed as a carcinogen.			
NTP	Cellulose is not classified as a carcinogen.			
IARC	Cellulose is not classified as a carcinogen.			
NUMERICAL MEASURES OF TOXICITY	No data available			
CORROSIVENESS, SENSITIZATION, IRRITANCY	Not applicable			
REPRODUCTIVE TOXICITY	Not available			
TERATOGENICITY, MUTAGENICITY	Not available			
SECTION 12: ECOLOGI	CAL INFORMATION			
ECOTOXICITY:	These products have no demonstr	ated toxicity in regards to aquatic or	terrestrial life.	
PERSISTENCE AND DEGRADABILITY	Non-biodegradable, inert.			
BIOACCUMULATIVE POTENTIAL	Little potential for bioaccumulation			
MOBILITY IN SOIL	No mobility			
OTHER ADVERSE EFFECTS	None known			

MATERIAL NAME	Pre-co-Floc® PB40, PB40M, PB33, PB33C, PB100M, PB200M, PB300M, PB20, PB20M, Page 4 of 4 PB900, NB 10 Page 4 of 4		
SECTION 13: DISPO	SAL CONSIDERATIONS		
WASTE DISPOSAL	If this material as supplied becomes a waste, use solid waste disposal common to landfill type operations or in slurry to sumps. Not considered a hazardous waste under RCRA (40CFR Part 261).		
PACKAGING DISPOSAL	Dispose of in accordance with applicable laws and regulations, typically solid waste disposal common to landfill type operations.		
SECTION 14: TRAN	SPORT INFORMATION		
BASIC SHIPPING INFORMATI	No restrictions.		
ADDITIONAL INFORMATION	No special requirements or placarding necessary.		
SECTION 15: REGU	_ATORY INFORMATION		
U.S. FEDERAL:			
TSCA	Cellulose appears on the EPA TSCA inventory list.		
CERCLA	Cellulose is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 302.		
SARA TITLE III	Not listed.		
INTERNATIONAL:			
WHMIS Classification	These products are not regulated by WHMIS		
WHMIS Ingredient Disclosure List	No reportable ingredients are present.		
SECTION 16: OTHE	₹ INFORMATION		
	0 Health		
	Yest 4-Extreme 3-High 3-High 2-Moderate 2 1-Slight 2		
	Image: Construction of the second		
	E Protective Equipment		
ORIGINAL ISSUE DATE	July 30, 2009		
REVISION DATE	July 31, 2014		
REVISION NO.	4		

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and handling of Combustible Particulate Solids, for safe handling.

Disclaimer: As of the date of the preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state laws. No warranty, representation or guaranty of any kind, express or implied, is hereby provided or intended with respect to the completeness of the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by the purchase, resale, use or exposure to our product. Customer users of silica must comply with all applicable health and safety laws, regulations and orders, including OSHA Hazardous Communication Standard.