May 8, 2015

Safety Data Sheet

1. Identification

Product Name: **Crafter's Choice™Bentonite Clay**

Synonyms: Smectile • Bentonite • Bentonite, Sodian • Bentonile, Calcian • Sodium-activated Bentonite • Montmorillonite

Recommended Use: Not Available

Recommended Restrictions: None known. Workers (and customers, if resold) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Supplied by:
Crafter's Choice Brands, LLC
7820 E. Pleasant Valley Road
Independence, OH 44131
(800) 908-7028
www.crafters-choice.com

In Case of Emergency:
ChemTel (MIS3548100)
(800) 255-3924 Domestic USA, Canada, Puerto Rico and USVI
+1 813 248-0585 International

2. Hazard(s) Identification

Physical Hazards	Not classified
Health Hazards	Not classified
Environmental Hazards	Not classified
OSHA Defined Hazards	Not classified

Label Elements

Hazard Symbol	None
Signal Word	None
Hazard Statement	The substance does not meet the criteria for classification.
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Hazards Not Otherwise Classified (HNOC) None known

Supplemental Information Not applicable

3. Composition / Information on Ingredients

Substances

Chemical Name	Common Name and Synonyms	CAS Number	%
Bentonite	Smectile Bentonite Bentonite, Sodian Bentonile, Calcian Sodium-activated Bentonite Montmorillonite	1302-78-9	100

Constituents

Chemical Name	CAS Number	%
Calcium Carbonate	471-34-1	
Smectite Group Minerals	1318-93-0	
Quartz	14808-60-7	< = 8
Cristobalite	14464-48-1	< = 2

Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret. Bentonite is a UVCB substance sub-type 4. The purity of the product Is 100 %w/w. Bentonite is composed mainly of smectite group minerals but the composition is varied, as expected for a UVCB substance, and other mineral constituents will be present in small and varying amounts. These minor constituents are not relevant for classification and labelling.

Composition comments Occupational Exposure Limits for constituents are listed in Section 8. The purity of the product is 100% w/w. Impurities are not applicable for a UVCB substance.

4. First-aid Measures

Inhalation If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist. No specific first aid measures noted.

Skin Contact Get medical attention if irritation develops and persists. No specific first aid measures noted. Wash skin with soap and water.

Eye Contact No specific first aid measures noted. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion No specific first aid measures noted. Get medical assistance if discomfort occurs.

Most important symptoms/affects, acute and delayed Dust in the eyes will cause irritation

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically.

5. Fire-fighting Measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (C02). Use any media suitable for the surrounding fires.

Unsuitable Extinguishing Media	Not applicable, non-combustible.
Specific Hazards from Chemical	None known. The product itself does not burn.
Special Protective Equipment and Precautions for Firefighters	Material can be slippery when wet.
Fire-fighting Equipment / Instructions	In the event of fire, cool tanks with water spray. Material can be slippery when wet.
Specific Methods	Cool containers exposed to flames with water until well after the fire is out.
General Fire Hazards	No unusual fire or explosion hazards noted. This material will not burn.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Material can be slippery when wet. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Avoid inhalation of dust from the spilled material. For personal protection, see section 8 of the SDS. No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.
Methods and materials For containment and cleaning up	If sweeping of a contaminated area is necessary, use a dust suppressant agent which does not react with the product. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container.
Environmental precautions	Prevent further leakage or spillage if safe to do so. No special environmental precautions required.

7. Handling and Storage

Precautions for safe handling	Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid breathing dust. Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Practice good housekeeping.
Conditions for safe storage, including any incompatibilities	No special restrictions on storage with other products. Store in a dry area. Store in original tightly closed container. Keep the container dry. Store In a well ventilated place. Store away from Incompatible materials (see Section 10 of the SDS). Guard against dust accumulation of this material.

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. OSHA Table Z-1Limits for Air Contaminants (29 CFR1910.1000)

Constituents	**Type**	**Value**	**Form**
Inert or Nuisance Dusts (CAS SEQ250)	PEL	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust

US OSHA Table Z-3 (29 CFR 1910.1000)

Constituents	Type	Value	Form
Inert or Nuisance Dusts (CAS SEQ250)	TWA	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust
		50 mppcf	Total dust
		15 mppcf	Respirable fraction

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL. Suitable respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

Eye/face protection	Use tight fitting goggles if dust is generated. Wear dust-resistant safety goggles where there is danger of eye contact.
Hand protection	No protection is ordinarily required under normal conditions of use.
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
Thermal hazards	Not applicable.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Use good industrial hygiene practices in handling this material.

9. Physical and Chemical Properties

Appearance	Lump, granular or fine powder
Physical state	Solid
Form	Powder. Various
Color	Various
Odor	None
Odor threshold	Not applicable
pH	8.5 – 11
Melting point/freezing point	> 842°F (> 450°C) / Not applicable
Initial boiling point and range	Not applicable
Flash point	Not applicable
Evaporation rate	Not available
Flammability (solid, gas)	This product is not flammable
Upper/lower flammability or explosive limits	
Flammability limit – lower	Not applicable
Flammability limit - upper	Not applicable
Explosive limit – lower	Not available
Explosive limit – upper	Not available
Vapor pressure	0 kPa at 25°C
	Not applicable
Vapor density	Not applicable
Relative density	2.6 g/cm3
Solubility	
Solubility (water)	< 0.9 mg/l
Partition coefficient	Not applicable
(noctanol/water)	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	> 932°F (> 500°C)
Viscosity	Not applicable
Viscosity temperature	Not applicable
Other Information	
Bulk density	0.9 – 1.4 g/cm3
Explosive limit	Not applicable
Explosive properties	Not explosive
Explosivity	Not applicable
Flame extension	Not applicable
Flammability	Not applicable
Flammability (flash back)	Not applicable
Flammability (Heat of combustion)	Not applicable
Flammability (Train fire)	Not applicable
Flammability class	Not applicable
Flash point class	Not flammable
Molecular formula	UVCB Substance
Molecular weight	Not applicable
Oxidizing properties	None
Percent volatile	0%
pH in aqueous solution	8.5 – 11
Specific gravity	Not applicable
VOC (Weight %)	0%

10. Stability and Reactivity

Reactivity	The product is stable and non-reactive
Chemical stability	Stable at normal conditions
Possibility of hazardous reactions	Will not occur
Conditions to avoid	Moisture. Avoid temperature exceeding the decomposition

temperature. Contact with incompatible materials. Avoid dispersal of dust in the air (i.e. clearing dust surfaces with compressed air).

Incompatible materials None known

Hazardous decomposition product None

11. Toxicological Information

Information on likely routes of exposure

Ingestion	Not classified
Inhalation	Inhalation of dusts may cause respiratory irritation
Skin contact	Not classified
Eye contact	Dust in the eyes will cause irritation

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity Not classified

	Species	**Test Results**
Acute		
Inhalation		
LC50	Rat	> 5.27 mg/l, 4 hrOECD 436
Oral		
LD50	Rat	> 2000 mg/kgOECD 425

Estimates for product may be based on additional component data not shown.

Skin corrosion / irritation Not classified

Serious eye damage / eye irritation Dust in the eyes will cause irritation. Mild irritant to eyes (according to the modified Kay and Calandra criteria)

Respiratory or skin sensitization

Respiratory sensitization	Not classified
Skin sensitization	Not classified

Germ cell mutagenicity Not classified

Carcinogenicity In June 2003, SCOEL (The EU Scientific Committee on Occupational Exposure Units) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient Information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. No carcinogenicity data available for this product. Sepiolite was evaluated by IARC as class 3 ("Cannot be classified as to carcinogenicity to humans). Based on read-across with sepiolite, bentonite was assessed as non-carcinogenic. Therefore8 classifications of bentonite for carcinogenicity is not warranted.

Reproductive toxicity Not classified

Specific target organ toxicity – single exp. Not classified

Specific target organ toxicity – repeated Not classified

Aspiration hazard Not available

12. Ecological Information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product		**Species**	**Test Results**
Bentonite (CAS 1302-78-9)			
Crustacea	EC50	Daphnia	>100 mg/l, 48 hrs
Other	EC50	Freshwater algae	>100 mg/l, 72 hrs
	LC50	Freshwater fish	16000 mg/l, 96 hrs
		Marine water fish	2800-3200 mg/l, 24 hrs
Aquatic			
Crustacea	EC50	Coon Stripe Shrimp (Pandalus danae)	24.8 mg/l, 96 hrs
		Dungeness or edible crab (Cancer magister)	81.6 mg/l, 96 hrs
Fish	LC50	Rainbow trout, Donaldson trout (Oncorhynchus mykiss)	19000 mg/l, 96 hrs

Estimates for product may be based on additional component data not shown

Persistence and degradability	Not relevant for inorganic substances
Bioaccumulative potential	Will not bio-accumulate.
Mobility in soil	Bentonite is almost insoluble and thus presents a low mobility in most soils.
Mobility in general	The product has poor water-solubility
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal Instructions	Collect and reclaim or dispose in seated containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused product	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions)
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Store containers and offer for recycling of material when in accordance with the local regulations.

14. Transport Information

DOT - Not regulated as dangerous goods.

IATA - Not regulated as dangerous goods.

IMDG - Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

15. Regulatory Information

US federal regulations

CERCLA Hazardous Substance List (40 CFR 302.4) – Not Listed

US.OSHA Specifically Regulated Substances (29 CFR1910.1001-1050) - Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely Hazardous Substance	No
SARA 311/312 Hazardous Chemical	No
SARA 313 (TRI reporting)	Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List:	Not regulated
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):	Not regulated
Safe Drinking Water Act (SWDA)	Not regulated
Food and Drug Administration (FDA)	Total food additive Direct food additive GRAS food additive

US State regulations

US. Massachusetts RTK – Substance List – Not regulated

US. New Jersey Worker and Community Right-to-Know Act – Not regulated

US. Rhode Island RTK – Not regulated

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country or region	Inventory Name	On Inventory (yes/no)
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substance List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINESC)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
USA & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Issue date:	31-March-2014
Revision date:	08-May-2015
Version #:	06
Further Information:	This safety data sheet only contains information relating to safety and does not replace any product information or product specification.
HMIS Rating:	Health: 1 Flammaibility: 0 Physical Hazard: 0
NFPA Rating:	Health: 0 Flammability: 0 Instability: 0
List of Abbreviations:	SWERF = Size-Weighted Relevant Fine Fraction methodology is a scientific method developed to quantify the content of respirable particles within a bulk product. UVCB = a substance of Unknown or Variable composition, Complex reaction products or Biological materials
References:	For any information on literature references or toxicity / ecotoxicity studies, please contact the supplier.
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