## **MATERIAL SAFETY DATA SHEET**

## SECTION I - PRODUCT AND COMPANY IDENTIFICATION

Product / Material: Poultry Litter Combustor Ash

Trade Name: N/A

Supplier: North American Fertilizer, LLC

Address: 940 Industry Drive, Benson, MN 56215

Phone Number: (320) 842-3001

## **SECTION II - HAZARDS IDENTIFICATION**

#### Overview

This material is a by-product of the combustion of biomass materials, primarily poultry litter which is comprised of turkey and/or chicken manure and bedding material (sawdust, sunflower hulls and/or barley hulls). It is produced by the Fibrominn waste to energy facility in Benson, MN and supplied by North American Fertilizer of Benson, MN.

## **Associated Hazards**

The primary route of exposure is inhalation of dust that may be generated with material handling. Therefore, care should be taken to minimize dust generation and avoid dust that is generated in handling the material.

A secondary route of exposure is ingestion, which can result from contaminated food or drink, smoking or improper hygiene. There should be no food or drink in the work area with this material and hands should be washed after working with the material.

#### NFPA Ratings

Health – 1 Fire – 0 Reactivity – 0 Other - none

#### SECTION III – HAZARDOUS INGREDIENTS (0.1% or greater)

Component	%	CAS#	OSHA PEL	ACGIH TLV
Copper	0.16	7440-50-8	1 mg/m <sup>3</sup> 8-hr TWA	1 mg/m <sup>3</sup> 8-hr TWA
Manganese	0.13	7439-96-5	5 mg/m <sup>3</sup> ceiling	0.2 mg/m <sup>3</sup> 8-hr TWA
Zinc	0.11	1314-13-2	10 mg/m <sup>3</sup> 8-hr TWA total dust	2 mg/m³ 8-hr TWA

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#### **SECTION IV - FIRST AID MEASURES**

Inhalation: Move to fresh air.

Eyes: Flush with eyewash for at least 15 minutes to remove particulate from the eye(s).

Skin: Wash after handling and contact. If dermatitis develops, seek the attention of a health

care professional.

**Ingestion**: Do not induce vomiting. Consult with a health care professional.

### SECTION V - FIRE FIGHTING MEASURES

Fire Fighting Procedures: Use water spray to wet down the material and reduce the likelihood of airborne dust generation. Use firefighting media that is suitable for surrounding material

Unusual Fire/Explosion Hazard: None known.

#### SECTION VI - ACCIDENTAL RELEASE MEASURES

**Accidental Release Procedures:** Sweep up or vacuum releases for disposal. Avoid creating dust, especially in an enclosed space. Contact applicable authorities if there has been a release.

## SECTION VII - HANDLING AND STORAGE

**Handling:** Avoid dust generation when handling and avoid inhalation of dust generated through handling.

**Storage:** Store in manner to protect the material from precipitation or store it in a diked area to prevent runoff and/or surface water contamination. Store the material in well-ventilated spaces. Store in accordance with local, state and federal regulations and codes.

## SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** NIOSH-approved respirator should be used if engineering and work practice controls are not sufficient to reduce exposure to concentrations less than applicable regulatory exposure limits.

**Ventilation:** Local and general area exhaust should be used to control dust concentrations as needed.

**Protective gloves:** Chemical resistant, leather or cloth gloves should provide protection against direct contact with the material.

Eye Protection: Safety glasses or dust goggles.

Other: Re-usable coveralls or disposable outerwear may be worn and left at the work site.

**Hygiene:** Good personal hygiene should be followed. This includes washing before eating, drinking or smoking. If possible, before leaving the work site remove dirty work clothing and change into clean street clothing.

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## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: Not Applicable Specific Gravity (H<sub>2</sub>O=1): Not Determined

Vapor Pressure: Not Applicable Melting Point: Not Applicable

Vapor Density (Air=1): Not Applicable Evaporation Rate (butyl acetate=1):

Not Applicable

Solubility in Water: Negligible Appearance and Odor: Gray to dark gray to

black with slight ammonia odor.

## **SECTION X - STABILITY AND REACTIVITY**

**Stability:** This material is stable under typical use conditions.

Conditions to Avoid: None known.

Incompatibility (Materials to Avoid): None known.

Hazardous Decomposition or Byproducts: None known

Hazardous Polymerization: Will not occur.

### SECTION XI - HEALTH HAZARD INFORMATION

Routes of Entry: Inhalation of dust, ingestion (mainly as the result of poor hygiene or eating, drinking or smoking in the work area), contact with eyes or skin.

**Health Hazards (Acute and Chronic):** May cause irritation from inhalation, ingestion, eye contact or skin contact. The use of proper work practices, protective gear and personal hygiene should help to reduce or eliminate exposure.

**Carcinogenicity:** The components were not found in the NTP or IARC databases. OSHA does not identify any components as carcinogenic.

**Signs and Symptoms of Exposure:** May cause eye or skin irritation on prolonged or repeated exposure. This is not a homogeneous material so signs and symptoms may vary. Contact a health care professional if there are any questions.

**Medical Conditions Generally Aggravated By Exposure:** Preexisting lung conditions or skin conditions may be aggravated by exposure. Consult a health care professional with any questions.

#### <u>SECTION XII - ECOLOGICAL INFORMATION</u>

Care must be exercised to prevent this material from entering ground and surface water. Spills/releases should be contained and cleaned-up promptly. The material should be protected from exposure to precipitation or stored in a diked area

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## **SECTION XIII – DISPOSAL CONSIDERATIONS**

This material must be used and disposed in accordance with local, state and federal requirements.

## **SECTION XIV – TRANSPORT INFORMATION**

Transport this material in a fully covered vehicle and in a manner to prevent it from blowing out of the transport vehicle and to protect it from precipitation.

## SECTION XV- REGULATORY INFORMATION

United States Regulatory Information

**TSCA 8 (b) Inventory Status:** All components are listed on the TSCA Inventory.

TSCA 12(b) Export Notification: None.

CERCLA/SARA 302 EHS: None.

CERCLA/SARA 311/312: Immediate and delayed health hazard.

CERCLA/SARA 313: All components are subject to the reporting requirements

of section 313 of the Emergency Planning and

Community Right-To-Know Act of 1986 (40 CFR 372).

California Proposition 65: No listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are DSL listed.

WHMIS hazard class: D2B

## SECTION XVI - OTHER INFORMATION

This MSDS was adapted from the MSDS written for Fibrowatt, LLC by Wenck Associates, Inc. and published on June 9, 2009.