

MSDS

4815

BOTTOM ASH FROM JEFFREY ENERGY

Product & Company Info

---- Section 01 Chemical Product and Company Identification -
--MATERIAL SAFETY DATA SHEET

IDENTITY: BOTTOM ASH (FROM JEFFREY ENERGY CENTER)

MANUFACTURER'S NAME: WESTAR ENERGY,
INC. ADDRESS: 818 KANSAS AVENUE
TOPEKA, KANSAS 66612

EMERGENCY TELEPHONE NUMBER: (785) 575-6050
TELEPHONE NUMBER FOR INFORMATION: (785) 575-6345

DATE PREPARED: FEBRUARY 27, 1996
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PREPARED BY LYNN

WIPE Composition

---- Section 02 Composition, Information on Ingredients ----

BOTTOM ASH IS A SUBSTANCE MADE UP OF SOLID PARTICLES ON UNCOMBUSTED COAL THAT HAVE PASSED THROUGH THE BOILER. THESE ARE FROM SUB BITUMINOUS (POWDER RIVER BASIN) COAL.

COMPONENTS	OSHA PEL	ACGIH TLV	OTHER
CRYSTALLINE SILICA (QUARTZ)	10 MG/M3 DIVIDED BY SiO ₂ + 2		3-5%
SILICON DIOXIDE, SiO ₂	TOTAL DUST-15MG/M3; RESP. DUST-5MG/M3		42%
CALCIUM OXIDE CaO	5 MG/M3		22%
ALUMINUM OXIDE, Al ₂ O ₃	TOTAL DUST-15MG/M3; RESP. DUST-5MG/M3		17%
IRON OXIDE, Fe ₂ O ₃	15 MG/M3		7%
MAGNESIUM OXIDE, MgO	15 MG/M3		5%
SODIUM OXIDE, Na ₂ O	TOTAL DUST		1%
TITANIUM DIOXIDE TiO ₂	TOTAL DUST		1%
LOSS ON IGNITION, %			2%

NOTE: CONCENTRATIONS ARE APPROXIMATE AND MAY VARY WITH COAL SOURCE AND BOILER OPERATING CONDITIONS. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CLASSIFIED CRYSTALLINE SILICA AS A KNOWN HUMAN CARCINOGEN.

Hazards Identification

---- Section 03 Hazards Identification

---ROUTE(S) OF ENTRY:

- (X) INHALATION
- (X) SKIN
- (X) INGESTION

HEALTH HAZARDS (ACUTE AND CHRONIC)

CHRONIC: PROLONGED OR REPEATED EXPOSURE TO BOTTOMASH MAY CAUSE LUNG INJURY INCLUDING SILICOSIS. CRYSTALLINE SILICA HAS BEEN CLASSIFIED BY IARC AS A KNOWN HUMAN CARCINOGEN. COME HUMAN STUDIES INDICATE A POTENTIAL FOR LUNG CANCER FROM CRYSTALLINE SILICA EXPOSURE. LONG TERM EXPOSURES WHICH RESULT IN SILICOSIS MAY ALSO RESULT IN ADDITIONAL HEALTH EFFECTS.

ACUTE: INHALATION OF BOTTOM ASH MAY CAUSE MODERATE IRRITATION OF THE UPPER RESPIRATORY SYSTEM. SKIN CONTACT MAY RESULT IN MILD IRRITATION. EYE CONTACT MAY RESULT IN STRONG IRRITATION OF BURNING OF THE EYES.

CARCINOGENICITY: YES
NTP

: N/A ARC

MONOGRAPHS:

N/A OSHA

REGULATED: YES

First Aid Measures

---- Section 04 First Aid Measures ----

INHALATION: REMOVE TO FRESH AIR. MAY CAUSE NOSE, THROAT AND LUNG IRRITATION AND CHOKING DEPENDING ON DEGREE OF EXPOSURE.

SKIN:

REMOVE MAJORITY OF BOTTOMASH DRY, AND THEN REMOVE THE RESIDUAL BOTTOM ASH WITH RUNNING WATER.

EYE:

FLUSH WITH COPIOUS AMOUNTS OF WATER FOR 15 MINUTES, CONSULT A PHYSICIAN. PROLONGED EYE EXPOSURE MAY RESULT IN SEVERE BURNS AND DAMAGE TO THE CORNEA.

INGESTION: DRINK LARGE QUANTITY OF WATER; DO NOT INDUCE VOMITING. INGESTING LARGE

AMOUNTS OF MAY CAUSE INTESTINAL DISTRESS.

Fire Fighting Measures

---- Section 05 Fire Fighting Measures

---FLASH POINT: NONE

FLAMMABLE LIMITS: N/A

LEL: N/A

UEL: N/A

EXTINGUISHING MEDIA: WATER

SPECIAL FIRE FIGHTING PROCEDURES:

DO NOT USE SOLID STREAM OF WATER WHEN FIGHTING FIRES; USE MIST STREAM TO REDUCE AIRBORNE DUST.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

Accidental Release

---- Section 06 Accidental Release Measures ----

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT SHOULD BE WORN BY CLEANUP PERSONNEL. CLEANUP BY USING A BROOM OR SHOVEL. A GENTLE SWEEPING ACTION SHOULD BE USED TO AVOID EXCESSIVE DUST PRODUCTION. WASH REMAINDER OF RESIDUAL PRODUCT WITH RUNNING WATER. THE BULK OF SPILLED BOTTOM ASH SHOULD BE RECOVERED FOR DISPOSAL OR RECLAMATION.

Handling & Storage

---- Section 07 Handling and Storage ----

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: BOTTOM ASH CAN BE STORED IN CLOSED TANKS OR CONTAINERS OR IN OPEN PILES IN A RECLAIM AREA.

OTHER PRECAUTIONS: WHEN HANDLING BOTTOM ASH, WEAR THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT IDENTIFIED IN SECTION 8.

Personal Protection

---- Section 08 Exposure Controls, Personal Protection --

RESPIRATORY PROTECTION: WEAR A NIOSH APPROVED CARTRIDGE RESPIRATOR OR DISPOSABLE DUST MASK BASED ON THE CONCENTRATION OF AIRBORNE BOTTOM ASH.

VENTILATION:

LOCAL EXHAUST: MAY BE REQUIRED INDOORS IF DUST PRODUCTION IS HIGH.

SPECIAL: N/A

OTHER: N/A

PROTECTIVE GLOVES: RUBBER GLOVES TO PREVENT SKIN CONTACT.

EYE PROTECTION: PROTECTIVE GOGGLES TO PREVENT EYE CONTACT.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: DISPOSABLE COVERALLS SHOULD BE WORN TO MINIMIZE SKIN CONTACT. A SAFETY EYE WASH SHOULD ALSO BE AVAILABLE.

WORK/HYGIENIC PRACTICES: AVOID INHALATION, SKIN CONTACT AND EYE CONTACT WHEN HANDLING BOTTOM ASH. CONTAMINATED CLOTHING SHOULD BE THOROUGHLY CLEANED BEFORE REUSE. HANDS SHOULD BE WASHED PRIOR TO EATING, DRINKING, OR SMOKING.

Physical/Chemical Property

---- Section 09 Physical and Chemical Properties

BOILING POINT: N/A

VAPOR PRESSURE (MM HG): N/A

VAPOR DENSITY (AIR=1): N/A

PH: 9.5 TO 10.5

SPECIFIC GRAVITY (H2O=1): 3

MELTING POINT: N/A

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: NOT READILY SOLUBLE IN WATER.

APPEARANCE AND ODOR:

A DARK GRAY TO BLACK COLORED GRANULAR MATERIAL WITH NO DETECTABLE ODOR

Stability & Reactivity

---- Section 10 Stability and Reactivity ----

STABILITY: UNSTABLE ()
 STABLE (X)

CONDITIONS TO AVOID:

ANYTHING REACTIVE TO ALKALINE SUBSTANCES MAY BE INCOMPATIBLE WITH BOTTOM ASH.

INCOMPATIBILITY (MATERIALS TO AVOID); N/A

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: NONE

HAZARDOUS POLYMERIZATION: MAY OCCUR ()
 WILL NOT OCCUR (X)

CONDITIONS TO AVOID: N/A

Toxicological Information

---- Section 11 Toxicological Information ---CRYSTALLINE SILICA HAS BEEN IDENTIFIED AS A HUMAN CARCINOGEN BY IARC.

Ecological Information

---- Section 12 Ecological Information -
No Data Available.

Disposal Considerations

---- Section 13 Disposal Considerations ----
WASTE DISPOSAL METHOD: RECOVERED BOTTOM ASH SHOULD BE DISPOSED OF IN A PERMITTED WASTE MANAGEMENT FACILITY. CONSULT FEDERAL, STATE, AND LOCAL REGULATIONS FOR APPROVED PROCEDURES.

Transport Information

---- Section 14 Transport Information ---NOT
A D.O.T. REGULATED MATERIAL.

Regulatory Information

---- Section 15 Regulatory Information ----
ALUMINUM AND MAGNESIUM ARE SARA 313 COMPOUNDS.

SOME CONSTITUENTS IN THIS PRODUCT ARE CONSIDERED TO BE HAZARDOUS AND SHOULD BE INCLUDED IN THE EMPLOYER'S HAZARD COMMUNICATION PROGRAM.

Other Information

INFORMATION ON THIS MSDS IS BELIEVED TO BE CURRENT AND ACCURATE AT THE TIME IT IS PROVIDED. IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THIS PRODUCT AND PROTECT THEIR EMPLOYEE'S ACCORDINGLY.

Codes/Numbers

TRI HWC

Material Code #:

Vendor Part #:

Stock Code #:

Genco Mnf. Part #:

Manufacturer: WESTAR ENERGY

MSDS Review Date: 10/28/2004

Locations

Jeffrey Energy Center