

MSDS

5067

ECONOMIZER ASH

Product & Company info

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

IDENTITY: ECONOMIZER ASH (FROM JEFFREY ENERGY CENTER)

MANUFACTURER'S NAME: WESTAR ENERGY
818 KANSAS AVE.
TOPEKA, KS 66612

EMERGENCY PHONE: 785 - 575 - 6050

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DATE PREPARED AUGUST 19, 2005

PREPARED BY LYNN WIPF

Composition

----- Section 02 Composition, Information on Ingredients -----
ECONOMIZER ASH IS A SUBSTANCE MADE OU OF FINE SOLID PARTICLES ON
NONCOMBUSTABLE
ASH FROM SUB BITUMINOUS COAL (POWDER RIVER BASIN) COAL.

COMPONENT(S)

CHEMICAL NAME	OSHA PEL	ACGIH TLV-TWA	
CRYSTALLINE SILICA SiO2	10 MG/M3 DIVIDED BY %SIO2 2		APROX. 3-5%
SILICONE DIOXIDE SiO2	TOTAL DUST 15MG/M3, RESP. DUST 5MG/M3		APROX. 28%
CALCIUM OXIDE CaO	5 MG/M3		17%
ALUMINUM TRIOXIDE Al2O3	TOTAL DUST-15MG/M3, RESP. DUST 5MG/M3		10%
MANGANESE OXIDE MnO	15 MG/M3		4%
IRON OXIDE Fe2O3	15 MG/M3		2%
SODIUM OXIDE Na2O	TOTAL DUST		1%
TITANIUM DIOXIDE TiO2			< 1%
SULFUR TRIOXIDE SO3			< 1%
BARIUM OXIDE BaO			< 1%
STRONTIUM OXIDE SrO			< 1%

NOTE: CONCENTRATIONS ARE APROXIMATE AND MAY VARY WITH COAL SOURCE AND BOILER OPERATING CONDITIONS. THE INTERNATIONAL AGENCY FOR RESEARCH OF 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 ECONOMIZER ASH MAY CAUSE LUNG INJURY INCLUDING SILICOSIS. CRYSTALLINE SILICA HAS BEEN CLASSIFIED BY IARC AS A KNOWN HUMAN CARCINOGEN. SOME HUMAN STUDIES INDICATE POTENTIAL FOR LUNG CANCER FROM CRYSTALLINE SILICA EXPOSURE. RISK OF INJURY DEPENDS ON DURATION AND LEVEL OF EXPOSURE. LONG TERM EXPOSURES WHICH RESULT IN SILICOSIS MAY ALSO RESULT IN ADDITIONAL HEALTH EFFECTS.

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

MAY RESULT IN IRRITATION OR BURNING OF THE EYES.

EXPOSURE LIMITS (WHEN EXPOSURE TO THIS PRODUCT AND OTHER CHEMICALS IS CONCURRENT, THE TLV MUST BE DEFINED IN THE WORKPLACE.)

OSHA TLV 5 MG/M3/%SiO₂+2 CRYSTALLINE SILICA

OSHA TLV 5MG/M3 CALCIUM OXIDE

INGESTION:

INGESTION OF FLY ASH, DEPENDING ON THE AMOUNT, MAY CAUSE MODERATE THROAT, ESOPHAGEAL, AND STOMACH DISCOMFORT BECAUSE OF ITS CAUSTIC EFFECT ON TISSUES.

First Aid Measures

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

INHALATION:

REMOVE TO FRESH AIR. MAY CAUSE NOSE, THROAT OR LUNG IRRITATION AND CHOKING DEPENDING ON DEGREE OF EXPOSURE. IF RESPIRATORY DISCOMFORT PERSISTS, SEEK MEDICAL ATTENTION. IF A VICTIM'S BREATHING HAS STOPPED, ADMINISTER ARTIFICIAL RESPIRATION. CALL FOR MEDICAL ASSISTANCE AS SOON AS POSSIBLE.

SKIN EXPOSURE:

REMOVE MAJORITY OF ECONOMIZER ASH DRY, THEN REMOVE RESIDUAL ASH WITH RUNNING WATER. IF IRRITATION PERSISTS SEEK MEDICAL ATTENTION.

EYE EXPOSURE:

FLUSH WITH COPIOUS AMOUNTS OF RUNNING WATER FOR AT LEAST 15 MINUTES. THE UPPER & LOWER EYELIDS SHOULD BE LIFTED OCCASIONALLY TO INSURE THAT ALL TISSUES ARE ADEQUATELY FLUSHED. PROLONGED EYE EXPOSURE MAY RESULT IN BURNS OR DAMAGE TO THE CORNEA. SEEK MEDICAL ATTENTION IMMEDIATELY AFTER THE IRRIGATION PERIOD.

INGESTION:

IN THE UNLIKELY EVENT OF INGESTION, DRINK LARGE AMOUNTS OF WATER. DO NOT INDUCE VOMITING IF FLY ASH HAS BEEN SWALLOWED. SEEK MEDICAL ATTENTION IF DISCOMFORT PERSISTS.

Fire Fighting Measures

---- Section 05 Fire Fighting Measures ----

FLASH POINT N/A

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 TO REDUCE AIRBORNE DUST.

UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A

Accidental Release

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

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED:

PERSONAL PROTECTIVE CLOTHING OR EQUIPMENT SHOULD BE WORN BY CLEANUP PERSONNEL.
CLEAN UP 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. BULK OF SPILLED ASH SHOULD BE RECOVERED FOR DISPOSAL OR RECLAMATION.

Handling & Storage

--- Section 07 Handling and Storage ---

BOTTOM ASH SHOULD BE STORED IN CLOSED TANKS OR CONTAINERS IN A DRY
ENVIRONMENT.

OTHER PRECAUTIONS:

WHEN HANDLING ASH WEAR THE APPROPRIATE PROTECTIVE EQUIPMENT.

Personal Protection

---- Section 08 Exposure Controls, Personal Protection ---No
Data Available.

RESPIRATORY PROTECTION: WEAR A NIOSH APPROVED CARTRIDGE RESPIRATOR
WHEN EXPOSED TO DUST ABOVE THE OSHA EXPOSURE LIMITS. A DISPOSABLE
DUST MASK MAY BE USED TO REDUCE IRRITATION TO THE RESPIRATORY
SYSTEM AT CONCENTRATIONS BELOW THE OSHA LIMITS.

VENTILATION,:

LOCAL EXHAUST MAY BE REQUIRED INDOORS IF DUST PRODUCTION IS HIGH

PROTECTIVE GLOVES: RUBBER GLOVES TO PREVENT SKIN CONTACT.

EYE PROTECTION: PROTECTIVE GOGGLES TO PREVENT EYE CONTACT.

OTHER PROTECTIVE EQUIPMENT:

DISPOSABLE COVERALLS SHOULD BE WORN TO MINIMIZE SKIN CONTACT. A SAFETY
EYE WASH SHOULD BE AVAILABLE.

WORK/HYGIENIC PRACTICES:

AVOID INHALATION, SKIN CONTACT AND EYE CONTACT WHEN HANDLING ECONOMIZER ASH.
HANDS SHOULD BE WASHED PRIOR TO EATING, DRINKING OR SMOKING.

Physical/Chemical Property

---- Section 09 Physical and Chemical Properties ----
APPEARANCE AND ODOR:
A LIGHT CREAM COLORED POWDER (COLOR MAY VARY) WITH NO DETECTABLE
ODOR.

SPECIFIC GRAVITY: (H2O=1) APPROX 2.6

BOILING POINT: N/A

PH: APPROX. 11

VAPOR DENSITY IN AIR (AIR = 1): N/A

VAPOR PRESSURE: N/A

%4 VOLATILE BY VOLUME: N/A

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: NOT READILY SOLUBLE IN WATER

Stability & Reactivity

---- Section 10 Stability and Reactivity ----
STABILITY: STABLE

CONDITIONS TO AVOID:

INCOMPATIBILITY (MATERIALS TO AVOID:
ANYTHING SENSITIVE TO ALKALINE SUBSTANCES MAY BE INCOMPATIBLE WITH ECONOMIZER
ASH.

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

Toxicological Information

---- Section 11 Toxicological Information ----
CRYSTALLINE SILICA HAS BEEN IDENTIFIED AS A PROBABLE
HUMAN CARCINOGEN

Ecological Information

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

Disposal Considerations

---- Section 13 Disposal Considerations ----
DISPOSE OF ECONOMIZER ASH ACCORDING TO FEDERAL, STATE
AND LOCAL REGULATIONS.

Transport Information

----- Section 14 Transport Information -----
NOT A HAZARDOUS MATERIAL IN TRANSPORTATION.

Regulatory information

----- Section 15 Regulatory Information -----
ALUMINUM, BARIUM AND MANGANESE ARE SARA 313 COMPOUNDS.
CRYSTALLINE SILICA HAS BEEN IDENTIFIED AS A PROBABLE HUMAN CARCINOGEN.
SOME CONSTITUENTS IN THIS PRODUCT ARE CONSIDERED HAZARDOUS ACCORDING TO
OSHA AND SHOULD BE INCLUDED IN THE EMPLOYER'S HAZARD COMMUNICATION PROGRAM.

Other Information

----- Section 16 Other Information -----
INFORMATION ON THIS MSDS IS BELIEVED TO BE CURRENT AND ACCURATE AT THE TIME
IT WAS PREPARED. IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF
SAFE USE OF THIS PRODUCT AND PROTECT THEIR EMPLOYEES ACCORDINGLY.

Codes/Numbers

TRI HWC

Material Code #:

Vendor Part #:

Stock Code #:

Genco Mnf. Part #:

Manufacturer:

WESTAR ENERGY

MSDS Review Date:

08/30/2005

Locations

Jeffrey Energy Center

Tecumseh Energy Center

Lawrence Energy Center