



Fly Ash SDS
Ottumwa Generating Station

Date Created: 07/19/23

Safety Data Sheet

Section 1

Identification of the Substance and of the Supplier

1.1 Product Identifier

Product Name/Identification:	Coal Fly Ash - Ottumwa Generating Station
Synonyms:	Class C Fly Ash
Product Code:	ASTM C618 Class C Fly Ash
Formula:	UVCB Substance

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advices Against

Relevant Identified Uses:	Component of wallboard, concrete, roofing material, bricks, cement kiln feed
Uses Advised Against:	None known

1.3 Details of the Supplier of the SDS

Manufacturer/Supplier:	National Minerals Corporation
Street Address:	12271 Margo Avenue
City, State and Zip Code:	Hastings, MN 55124
Customer Service Telephone:	651-686-1000
E-mail Address:	info@nmcflyash.com

1.4 Emergency Telephone Number

Emergency Phone Number:	651-686-1000
Hours Available:	7AM – 5PM cst

Section 2 Hazards Identification

2.1 Classification of the Substance

GHS Classification(s) according to OSHA Hazard Communication Standard (29 CFR 1910.1200):

STOT – SE Category -3
Eye Irritant Category 2A
STOT RE Category 2

Note: The level of respirable crystalline silica (RCS) present in this product has not been determined; however, a conservative classification for STOT-RE, Category -2 has been assigned.

2.2 Label Elements

Labelling according to 29 CFR 1910.1200 Appendices A, B and C*	
Hazard Pictogram(s):	 
Signal word:	Danger
Hazard Statement(s):	Causes Eye Irritation May cause respiratory irritation May cause damage to lungs after prolonged exposure via inhalation
Precautionary Statement(s):	Do not breathe dust Wash thoroughly after handling Wear eye protection Get medical advise/attention if you feel unwell Store in secure area Dispose of product in accordance with local/national regulations

* Fly ash and other coal combustion products (CCPs) are UVCB substances (substance of unknown or variable composition or biological). Various CCPs, noted as Ashes; Ash; Ash residues; Ashes, residues, bottom; Bottom ash; Bottom ash residues; Waste solids, ashes under TSCA are defined by the US EPA as: "The residuum from the burning of a combination of carbonaceous materials. The following elements may be present as oxides: aluminum, calcium, iron, magnesium, nickel, phosphorus, potassium, silicon, sulfur, titanium, and vanadium." Ashes including fly ash and fluidized bed combustion ash are identified by CAS number 68131-74-8. The exact composition of the ash is dependent on the fuel source and flue additives composed of a large number of constituents. The

classification of the final substance is dependent on the presence of specific identified oxides as well as other trace elements.

2.3 Other Hazards

Listed Carcinogens:

-Respirable Crystalline Silica

IARC: [Yes] **NTP:** [Yes] **OSHA:** [Yes] **Other (ACGIH) :** [Yes]

Section 3

Composition/Information on Ingredients

<i>Substance</i>	<i>CAS No.</i>	<i>Percentage (%)</i>	<i>Hazard Classification</i>
<i>Aluminosilicates</i>	<i>Various: See note 1</i>	<i>15-24%</i>	<i>Single Exposure STOT, Category 3</i>
<i>Crystalline Silica</i>	<i>14808-60-7</i>	<i>1-5%</i>	<i>Repeat Dose STOT, Category 1 Carcinogenicity Category 1A</i>
<i>Silica, crystalline respirable (RCS)</i>	<i>14808-60-7</i>	<i>≥0.1% ; See note 3</i>	<i>Repeat Dose STOT, Category 1 Carcinogenicity Category 1A</i>
<i>Calcium oxide (CaO)</i>	<i>1305-78-8</i>	<i>Total 16-29%</i>	<i>Skin Irritant Category 2 Eye Irritant Category 1 Single Exposure STOT, Category 3</i>
<i>Manganese dioxide (MnO₂)</i>	<i>1313-13-9</i>	<i>If ≥1%</i>	<i>Skin Irritant Category 2 Eye Irritant Category 2B</i>
<i>Phosphorus pentoxide (P₂O₅)</i>	<i>1314-56-3</i>	<i>If ≥1%</i>	<i>Skin Irritant Category 2 Eye Irritant Category 2B</i>
<i>Potassium oxide (K₂O)</i>	<i>12136-45-7</i>	<i>≥1%</i>	<i>Skin Irritant Category 2 Eye Irritant Category 2B</i>
<i>Magnesium sulfate</i>	<i>7487-88-9</i>	<i>≥1%</i>	<i>Skin Irritant Category 2 Eye Irritant Category 2B</i>
<i>Bromide salts</i>	<i>Insert corresponding CAS No.</i>	<i>≥0.1%</i>	<i>Toxic to Reproduction Category 2</i>

1. Aluminosilicates may be in the form of mullite (CAS#1302-93-8); pozzolans, coal ash (CAS#71243-67-9); or aluminosilicates (CAS# 1327-36-2). The form is dependent on the source of the coal and or the process used to create the CCP. Pulverized coal combustion would be more likely to create high levels of pozzolans, coal ash (particularly bottom ash) due to the high heat of combustion while the circulating fluidized bed (CFB) process would be less likely to generate this glassy aluminosilicate. Choose the most appropriate CAS # for the CCP based on this data.
2. Report the level of crystalline silica in the product if the level of Respirable Crystalline Silica has not been determined. If the level of RCS has been determined delete the Crystalline Silica row.
3. Report the level of RCS if known. If the RCS level has not been determined, footnote the crystalline silica value to indicate that the respirable portion of the substance in the CCP has not been determined and delete the RCS row.
4. This percentage includes either total calcium oxide or free calcium oxide, if available. Please specify type of calcium oxide that the percentage represents or report both if available.

Section 4

First Aid Measures

4.1 Description of First Aid Measures

Inhalation:	If product is inhaled and irritation of the nose or coughing occurs, remove person to fresh air. Get medical advice/attention if respiratory symptoms persist.
Skin Contact:	If skin exposure occurs, wash with soap and water.
Eye Contact:	If product gets into the eye, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Seek medical attention/advice if irritation occurs or persists.
Ingestion:	No specific first aid measures are required.

4.2 Most Important Health Effects, Both Acute and Delayed

For CCP compositions 1 and 2

Acute effects: Direct exposure may cause respiratory irritation, eye irritation and skin irritation. The product dust can dry and irritate the skin and cause dermatitis and can irritate eyes and skin through mechanical abrasion.

Chronic effects: None known.

For CCP compositions 3 through 6

Acute effects: Direct exposure may cause respiratory irritation, eye irritation and skin irritation. The product dust can dry and irritate the skin and cause dermatitis and can irritate eyes and skin through mechanical abrasion.

Chronic effects: Chronic exposure may cause lung damage from repeated exposure. Prolonged inhalation of respirable crystalline silica above certain concentrations may cause lung diseases, including silicosis and lung cancer.

For CCP compositions 7 and 8

Acute Effects: Direct exposure may cause respiratory irritation, eye irritation and skin irritation. The product dust can dry and irritate the skin and cause dermatitis and can irritate eyes and skin through mechanical abrasion.

Chronic Effects: Repeated exposure to dusts containing inorganic bromide salts may affect fertility and/or result in effects to the unborn child.

For CCP compositions 9 through 12



Acute Effects: Direct exposure may cause respiratory irritation, eye irritation and skin irritation. The product dust can dry and irritate the skin and cause dermatitis and can irritate eyes and skin through mechanical abrasion.

Chronic Effects: Chronic exposure may cause lung damage from repeated exposure. Prolonged inhalation of respirable crystalline silica above certain concentrations may cause lung diseases, including silicosis and lung cancer. Repeated exposure to dusts containing inorganic bromide salts may affect fertility and/or result in effects to the unborn child.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Seek first aid or call a doctor or Poison Control Center if contact with eyes occurs and irritation remains after rinsing. Get medical advice if inhalation occurs and respiratory symptoms persist.

Section 5 Firefighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media:	Product is not flammable. Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media:	Not applicable, the product is not flammable.

5.2 Special Hazards Arising From the Substance or Mixture

Hazardous Combustion Products:	None known.
---------------------------------------	-------------

5.3 Advice for Firefighters

Special Protective Equipment and Precautions for Firefighters:	As with any fire, wear self-contained breathing apparatus (NIOSH approved or equivalent) and full protective gear.
---	--

Section 6 Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions/Protective Equipment:	See Section 8.3 Individual Protective Measures. For concentrations exceeding Occupational Exposure Levels (OELs), use a self-contained breathing apparatus (SCBA).
Emergency procedures:	Use scooping, water spraying/flushing/misting or ventilated vacuum cleaning systems to clean up spills. Do not use pressurized air. Avoid creating airborne dust during clean-up.

6.2 Environmental Precautions

Environmental precautions:	Prevent contamination of drains or waterways and dispose according to local and national regulations.
-----------------------------------	---

6.3 Methods and Material for Containment and Cleaning Up

Methods and materials for containment and cleaning up:	Do not use brooms or compressed air to clean surfaces. Use dust collection vacuum and extraction systems. Large spills of dry product should be removed by a vacuum system. Dampened material should be removed by mechanical means and recycled or disposed of according to local and national regulations.
---	--

See Sections 8 and 13 for additional information on exposure controls and disposal.

Section 7 Handling and Storage

7.1 Precautions for Safe Handling

Practice good housekeeping. Use adequate exhaust ventilation, dust collection and/or water mist to maintain airborne dust concentrations below permissible exposure limits (note: respirable crystalline silica dust may be in the air without a visible dust cloud).

Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain and test ventilation and dust collection equipment. In cases of insufficient ventilation, wear a NIOSH approved respirator for silica dust when handling or disposing dust from this product. Avoid contact with skin and eyes. Wash or vacuum clothing that has become dusty. Avoid eating, smoking, or drinking while handling the material.

7.2 Conditions for Safe Storage, Including any Incompatibilities

Minimize dust produced during loading and unloading.

Section 8 Exposure Controls/Personal Protection

8.1 Control Parameters

OCCUPATIONAL EXPOSURE LIMITS					
SUBSTANCE		OSHA PEL TWA (mg/m ³)	NIOSH REL TWA (mg/m ³)	ACGIH TLV TWA (mg/m ³)	CA - OSHA PEL (mg/m ³)
Calcium oxide		5	2	2	2
Particulates Not Otherwise	Total	15	15	-	10

Regulated	Respirable	5	5	-	5
Respirable Crystalline Silica	Total	0.05	0.05	0.025	0.05
Manganese dioxide	Total	5 (Ceiling)	1 3 (STEL)	0.1	0.2
(as manganese compounds)	Respirable	-	-	0.02	-

8.2 Exposure Controls

8.2.1 Engineering Controls

Provide ventilation to maintain the ambient workplace atmosphere below the occupational exposure limit(s). Use general and local exhaust ventilation and dust collection systems as necessary to minimize exposure.

8.2.2 Personal Protective Equipment (PPE)

Respiratory protection:	Wear a NIOSH approved particulate respirator if exposure to airborne particulates is unavoidable and where occupational exposure limits may be exceeded. If airborne exposures are anticipated to exceed applicable PELs or TLVs, a self-contained breathing apparatus or airline respirator is recommended.
Eye and face protection:	If eye contact is possible, wear protective glasses with side shields. Avoid contact lenses.
Hand and skin protection:	Wear gloves and protective clothing. Wash hands with soap and water after contact with material.

Section 9

Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Property: Value	Property: Value
Appearance (physical state, color, etc.): Fine tan/gray particulate	Upper/lower flammability or explosive limits: Not applicable
Odor: Odorless ¹	Vapor Pressure (Pa): Not applicable
Odor threshold: Not applicable	Vapor Density: Not applicable
pH (25 °C)(in water): 8-12	Specific gravity or relative density: 2.5-3.0

Melting point/freezing point (°C): Not applicable	Water Solubility: Slight
Initial boiling point and boiling range (°C): Not applicable	Partition coefficient: n-octane/water: Not determined
Flash point (°C): Not determined	Auto ignition temperature (°C): Not applicable
Evaporation rate: Not applicable	Decomposition temperature (°C): Not determined
Flammability (solid, gas): Not combustible	Viscosity: Not applicable

¹ The use of urea or aqueous ammonia injected into the flue gas to reduce nitrogen oxides (NOx) emissions may result in the presence of ammonium sulfate or ammonium bisulfate in the ash at less than 0.1%. When ash containing these substances becomes wet under high pH (>9), free ammonia gas may be released resulting in objectionable/nuisance ammonia odor and potential exposure to ammonia gas especially in confined spaces.

9.2 Other Information

Section 10 Stability and Reactivity

10.1 Reactivity:	The material is an inert, inorganic material primarily composed of elemental oxides.
10.2 Chemical stability:	The material is stable under normal use conditions.
10.3 Possibility of hazardous reactions:	The material is a relatively stable, inert material; polymerization will not occur. or The material is a relatively stable, inert material; however, when ash containing ammonia becomes wet under high pH (>9), free ammonia gas may be released resulting in an objectionable/nuisance ammonia odor and potential exposure to ammonia gas especially in confined spaces. Polymerization will not occur.
10.4 Conditions to avoid:	Product can become airborne in moderate winds. Dry material should be stored in silos. Materials stored out of doors should be covered or maintained in a damp condition.
10.5 Incompatible materials:	None known.
10.6 Hazardous decomposition products:	None known.

Section 11

Toxicological Information

11.1 Information on Toxicological Effects

Endpoint	Data
Acute oral toxicity	LD50 > 2000 mg/kg
Acute dermal toxicity	LD50 > 2000 mg/kg
Acute inhalation toxicity	LC50 > 50 mg/kg
Skin corrosion/irritation	Not irritant to skin
Eye damage/irritation	Positive scores for irritation and chemosis in 2/3 of animals tested on average 24,48,72 hour scores with irritation clearing within 21 days; No corneal effects observed.
Respiratory/skin sensitization	Not a respiratory or dermal sensitizer.
Germ cell mutagenicity	Not mutagenic in in-vitro assays or without metabolic activation.
Carcinogenicity	Not available. Respirable crystalline silica has been identified as a carcinogen by NTP and IARC.
Reproductive toxicity	There is not enough evidence available to classify according to reproductive toxicity. No developmental toxicity has been observed in available animal studies.
STOT-SE	No specific organ toxicity after a single exposure to the substance is expected; however, presence as a nuisance dust may result in respiratory irritation.
STOT-RE	NOAEC= 4.2 mg/m fly ash dust; as no effects were observed at the highest dose tested during the 180 day inhalation study it is not possible to assess the level at which toxicologically significant effects may occur.

Section 12

Ecological Information

12.1 Toxicity

No data available on final product.

12.2 Persistence and Degradability

Not relevant for inorganic materials.

12.3 Bioaccumulative Potential

No data available.

12.4 Mobility in Soil

No data available.

12.5 Results of PBT and vPvB Assessment

No data available.

12.6 Other Adverse Effects

None known.

Section 13 Disposal Considerations

See Sections 7 and 8 for safe handling and use, including appropriate hygienic practices.

Dispose of all waste product and containers in accordance with federal, state and local regulations.

Section 14 Transport Information

Regulatory entity: U.S. DOT	Shipping Name:	Not Regulated
	Hazard Class:	Not Regulated
	ID Number:	Not Regulated
	Packing Group:	Not Regulated

Section 15 Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Mixture

- TSCA Inventory Status

All components are listed on the TSCA Inventory.

○ California Proposition 65

The following substances are known to the State of California to be carcinogens and/or reproductive toxicants:

- Respirable crystalline silica
- Titanium dioxide (airborne particles)

○ State Right-to-Know (RTK)

Component	CAS	MA ^{1,2}	NJ ^{3,4}	PA ⁵	RI ⁶
Ammonium bisulfate	7803-63-6	No	Yes	No	No
Ammonium sulfate	7783-20-2	Yes	No	Yes	No
Barium oxide-as Barium compounds	1304-28-5; Various	No	Yes	Yes	Yes
Calcium carbonate	1317-65-3	Yes	Yes	Yes	No
Calcium oxide	1305-78-8	Yes	Yes	Yes	No
Calcium sulfate	7778-18-9	Yes	Yes	Yes	No
Iron oxide	1309-37-1	Yes	Yes	Yes	No
Magnesium oxide	1309-48-4	No	Yes	No	No
Manganese oxide-as manganese compounds	1313-13-9; Various	No	No	Yes	Yes
Phosphorus pentoxide (or phosphorus oxide)	1314-56-3	Yes	Yes	Yes	No
Potassium oxide	12136-45-7	No	Yes	No	No
Silica-crystalline (SiO ₂), quartz	14808-60-7	Yes	Yes	Yes	No
Sodium oxide	1313-59-3	No	Yes	No	No
Sodium sulfate	7757-82-6	Yes	No	Yes	No
Titanium dioxide	13463-67-7	Yes	Yes	Yes	No

¹ Massachusetts Department of Public Health, no date

² 189th General Court of The Commonwealth of Massachusetts, no date

³ New Jersey Department of Health and Senior Services, 2010a

⁴ New Jersey Department of Health, 2010b

⁵ Pennsylvania Code, 1986

⁶ Rhode Island Department of Labor and Training, no date

○ Other Environmental Listings

Section 16

Other Information, Including Date of Preparation or Last Revision

16.1 Indication of Changes

Date of preparation or last revision: 3/27/17

16.2 Abbreviations and Acronyms

- ACGIH: American Conference of Industrial Hygienists
- ANSI: American National Standards Institute
- CA: California
- CAA: Clean Air Act
- CAS: Chemical Abstract Services

- CCP: Coal Combustion Product
- CFB: Circulating Fluidized Bed
- CFR: Code of Federal Regulations
- CWA: Clean Water Act
- EPA: Environmental Protection Agency
- GHS: Globally Harmonized System of Classification and Labelling
- HMIS: Hazardous Materials Identification System
- IARC: International Agency for Research on Cancer
- LC50: Concentration resulting in the mortality of 50 % of an animal population
- LD50: Dose resulting in the mortality of 50 % of an animal population
- LEL: Lower explosive limit
- MA: Massachusetts
- NA: Not Applicable
- NJ: New Jersey
- NOEC: No observed effect concentration
- NIOSH: National Institute of Occupational Safety and Health
- NOx: Nitrogen oxides
- NTP: US National Toxicology Program
- OEL: Occupational Exposure Limit
- OSHA: Occupational Safety and Health Administration
- PA: Pennsylvania
- Pa: Paschal
- PBT: Persistent, Toxic and Bioaccumulative
- PEL: Permissible exposure limit
- PPE: Personal Protective Equipment
- REL: Recommended exposure limit
- RI: Rhode Island
- RCS: Respirable Crystalline Silica
- RTK: Right-to-Know
- SARA: Superfund Amendments and Reauthorization Act
- SCBA: Self-contained breathing apparatus
- SDS: Safety Data Sheet
- STEL: Short-term exposure limit
- STOT-RE: Specific target organ toxicity-repeated exposure
- STOT-SE: Specific target organ toxicity-single exposure
- TLV: Threshold limit value
- TSCA: Toxic Substances Control Act
- TWA: Time-weighted average
- UEL: Upper explosive limit
- UVCB: Unknown or Variable Composition/Biological
- U.S.: United States
- U.S. DOT: United States of Department of Transportation
- vPvB: Very Persistent and Very Bioaccumulative

16.3 Other Hazards

CCP 1: STOT-SE Category 3 (Respiratory Irritation)

Hazardous Materials Identification System (HMIS)

Degree of hazard (0= low, 4 = extreme)						
Health:	1	Flammability:	0	Physical Hazards:	0	Personal protection:*

** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.*

CCP 2: STOT-SE Category 3 (Respiratory Irritation), Eye irritation Category 2A

Hazardous Materials Identification System (HMIS)						
Degree of hazard (0= low, 4 = extreme)						
Health:	2	Flammability:	0	Physical Hazards:	0	Personal protection:*

** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.*

CCP 3: STOT-SE Category 3 (Respiratory Irritation), Carcinogen Category 1A

Hazardous Materials Identification System (HMIS)						
Degree of hazard (0= low, 4 = extreme)						
Health:	1*	Flammability:	0	Physical Hazards:	0	Personal protection: **

** Chronic Health Effects*

*** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.*

CCP 4: STOT-SE Category 3 (Respiratory Irritation), Eye irritation Category 2A,
Carcinogen Category 1A

Hazardous Materials Identification System (HMIS)						
Degree of hazard (0= low, 4 = extreme)						
Health:	2*	Flammability:	0	Physical Hazards:	0	Personal protection:**

** Chronic Health Effects*

*** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.*

CCP 5: STOT-SE Category 3 (Respiratory Irritation), Carcinogen Category 1A,
STOT-RE Category

Hazardous Materials Identification System (HMIS)							
Degree of hazard (0= low, 4 = extreme)							
Health:	2*	Flammability:	0	Physical Hazards:	0	Personal protection:**	

* Chronic Health Effects

** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.

CCP 6: STOT-SE Category 3 (Respiratory Irritation), Carcinogen Category 1A
STOT-RE Category , Eye Irritant Category 2A

Hazardous Materials Identification System (HMIS)							
Degree of hazard (0= low, 4 = extreme)							
Health:	2*	Flammability:	0	Physical Hazards:	0	Personal protection:**	

* Chronic Health Effects

** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.

CCP 7: STOT-SE Category 3 (Respiratory Irritation), Toxic to Reproduction Category 2

Hazardous Materials Identification System (HMIS)							
Degree of hazard (0= low, 4 = extreme)							
Health:	1*	Flammability:	0	Physical Hazards:	0	Personal protection:**	

* Chronic Health Effects

** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.

CCP 8: STOT-SE Category 3, STOT-RE Category 12, Toxic to Reproduction Category 2,
Eye Irritation Category 2A

Hazardous Materials Identification System (HMIS)							
Degree of hazard (0= low, 4 = extreme)							
Health:	2*	Flammability:	0	Physical Hazards:	0	Personal protection:**	

* Chronic Health Effects

**** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.**

CCP 9: STOT-SE Category 3 (Respiratory Irritation), Carcinogen Category 1A
Toxic to Reproduction Category 2

Hazardous Materials Identification System (HMIS)						
Degree of hazard (0= low, 4 = extreme)						
Health:	1*	Flammability:	0	Physical Hazards:	0	Personal protection:**

* Chronic Health Effects

**** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.**

CCP 10: STOT-SE Category 3 (Respiratory Irritation), Carcinogen Category 1A,
Eye Irritant Category 2A, Toxic to Reproduction Category 2

Hazardous Materials Identification System (HMIS)						
Degree of hazard (0= low, 4 = extreme)						
Health:	2*	Flammability:	0	Physical Hazards:	0	Personal protection:**

* Chronic Health Effects

**** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.**

CCP 11: STOT-SE Category 3 (Respiratory Irritation), STOT-RE Category 12,
Carcinogen Category 1A , Toxic to Reproduction Category 2

Hazardous Materials Identification System (HMIS)						
Degree of hazard (0= low, 4 = extreme)						
Health:	1*	Flammability:	0	Physical Hazards:	0	Personal protection:**

* Chronic Health Effects

**** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.**

CCP 12: STOT-SE Category 3 (Respiratory Irritation), Eye Irritant Category 2A,
STOT-RE Category 12, Carcinogen Category 1A,
Toxic to Reproduction Category 2

Hazardous Materials Identification System (HMIS)						
--	--	--	--	--	--	--

Degree of hazard (0= low, 4 = extreme)							
Health:	2*	Flammability:	0	Physical Hazards:	0	Personal protection:**	

* Chronic Health Effects

** Appropriate personal protection is defined by the activity to be performed.
See Section 8 for additional information.

DISCLAIMER:

This SDS has been prepared in accordance with the Hazard Communication Rule 29 CFR 1910.1200. Information herein is based on data considered to be accurate as of date prepared. No warranty or representation, express or implied, is made as to the accuracy or completeness of this data and safety information. No responsibility can be assumed for any damage or injury resulting from abnormal use, failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.