

SAFETY DATA SHEET

SECTION 1: Product and Company Identification

- 1.1. Product identifier
- | | |
|----------------|-----------------------|
| Product code | Flexible Files |
| Issue date | 10-July-2015 |
| Version number | 01 |
- 1.2. Details of the supplier of the safety data sheet
- | | |
|-----------------------|--|
| Manufacturer/Supplier | |
| Company name | Martindale Electric Co. |
| Address | 1375 Hird Avenue
Cleveland, OH 44107 |
| Telephone | 216-521-8567 |
| Email | sales@martindaleco.com |
- 1.3. Emergency telephone
- | | |
|--------|--------------|
| Number | 216-521-8567 |
|--------|--------------|

Section 1 notes: These files are sold as articles and as such fall under the 'article exemption' in OSHA's Hazard Communication Standard (29 CFR 1910.1200). The following information is provided in the event that any cutting or grinding on the part is undertaken.

SECTION 2: Hazards identification

- 2.1. Overexposure to excessive dust may cause eye/skin irritation, choking sensation or respiratory tract damage.
- 2.2. If acute overexposure to dust occurs, remove to dust free area. Avoid excessive dust inhalation.
- If acute overexposure to dust occurs:
- For eyes – Flush well with running water. Seek medical attention.
 - For skin – Brush off excessive dust, wash area well with soap and water.

SECTION 3: Composition/information on ingredients

3.1. Mixtures

General information

Chemical name	% Concentration	CAS-No.
Clear acetate (substrate)	< 33	
Aluminum oxide	47-54	1344-28-1
Zirconium oxide	13-20	1314-23-4
Hafnium oxide	< 1.0	12055-23-1

SECTION 4: First aid measures

- 4.1. Description of first aid measures
- If inhaled:
Remove to fresh air. Apply artificial respiration as needed. Obtain first aid or medical assistance.
- In case of skin contact:
Obtain first aid or medical assistance if needed.

In case of eye contact:
Wash with large amounts of water; obtain medical assistance if needed.

If swallowed:
Obtain first aid or medical assistance if needed.

SECTION 5: Firefighting measures

5.1. Fire Hazard Data:

Flash Point: Not applicable
Extinguishing Media: Not applicable
Special Fire Fighting Procedures: None
Explosion Potential: None

SECTION 6: Accidental release measures

6.1. Not applicable.

SECTION 7: Handling and storage

7.1. Handling

Handle with adequate ventilation for nuisance dust. If sweeping is necessary, use dust suppressant agent.

7.2. Waste disposal procedure

Dispose in closed containers using standard landfill methods consistent with applicable federal, state or local laws.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Component	CAS-No.	Value	Control parameters	Basis
Clear acetate (substrate)				
Aluminum oxide	1344-28-1	TWA	15 mg/m ³	USA. Occupational Exposure Limits (OSHA)
Zirconium oxide	1314-23-4	TWA	5 mg/m ³	USA. Occupational Exposure Limits (OSHA)
Hafnium oxide	12055-23-1	TWA	0.5 mg/m ³	USA. Occupational Exposure Limits (OSHA)

8.2. Exposure controls

Appropriate Engineering Controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hand before breaks and at the end of workday.

8.3. Personal Protective Equipment:

Respiratory protection: As needed, approved dust respirator

Ventilation: Use general or local exhaust ventilation.

Protective gloves: Not normally necessary. As desired by user.

Eye protection: Recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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|-------------------------------|----------------------------|
| a) Appearance | Grey, flat, abrasive sheet |
| b) Odor | N/A |
| c) Percent volatile by volume | <1% |
| d) Acidity/Alkalinity | N/A |
| e) Melting point | N/A |
| f) Boiling point | N/A |
| g) Evaporation rate | N/A |
| h) Specific gravity | 1.40-1.50 |
| i) Vapor pressure | N/A |
| j) Vapor density | N/A |
| k) Water solubility | Insoluble |

l) Flash point 305 deg. C

SECTION 10: Stability and reactivity

- 10.1. Chemical stability
Stable
- 10.2. Incompatibility (Materials to avoid)
None
- 10.3. Hazardous decomposition or byproducts
None
- 10.4. Hazardous polymerization
Will not occur

SECTION 11: Toxicological information

- 11.1. Products in their usual physical form do not pose any health hazards. However, when subjected to welding, burning, sawing, brazing, grinding, etc. potentially hazardous fumes or dust may be generated. The above operations should be performed in well ventilated areas. The primary route of exposure is from inhalation of fumes and dusts. The effects of overexposure to the various metal fumes and dusts which may be generated from this product and the associated health effects from overexposure are as follows:

Effect of Acute Exposures: Excessive inhalation of metallic fumes and dusts may be irritating to respiratory passages. May cause coughing, shortness of breath. No know adverse effects, but ingestion not recommended. Not absorbed through skin; may cause abrasions. May irritate eyes.

Effect of Chronic Exposures: Chronic inhalation of high concentrations of metallic fumes and dusts are associated with the following condition: benign pneumoconiosis, pneumonia and lung damage, pulmonary fibrosis, and other respiratory conditions.

SECTION 12: Ecological information

- 12.1. Not available

SECTION 13: Disposal considerations

- 13.1. Dispose in closed containers using standard landfill methods consistent with applicable federal, state or local laws.

SECTION 14: Transport information

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods
Packaging group	Not regulated

SECTION 15: Regulatory information

SARA 302 Components

SARA 302: As an article, no chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: As an article, no components are subject to reporting levels established by SARA Title III, Section 313.

STATE	REVISION DATE
California OELs/PELs Aluminum Oxide, Zirconium Oxide	2015-01-01
Indiana Occupational Health and Safety Standards Aluminum Oxide, Zirconium Oxide	1998-08-14
Kentucky Occupational Health and Safety Standards Aluminum Oxide, Zirconium Oxide	
Massachusetts Right-to-Know Substance List Aluminum Oxide, Zirconium Oxide	
Minnesota Hazardous Substances List	2008-06-11

Aluminum Oxide, Zirconium Oxide

New Jersey Right-to-Know Hazardous Substance List 2010

Aluminum Oxide

New York City Community Right-to-Know Hazardous Substance List

Aluminum Oxide

STATE	REVISION DATE
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Pennsylvania Right-to-Know Hazardous Substances	
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Aluminum Oxide	
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Rhode Island Hazardous Substances Right-to-Know Act	2011-07
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Aluminum Oxide	
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Tennessee OELs	2008-06
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Aluminum Oxide, Zirconium Oxide	
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Texas Effects Screening Levels	2014-03-17
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Aluminum Oxide, Zirconium Oxide	
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California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

SECTION 16: Other information

HMIS Rating

Health Hazard: 1

Flammability: 0

React: 0

Further Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Martindale Electric Co. and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

Preparation Information

Martindale Electric Co.

216-521-8567