

Material Safety Data Sheet

Section 1 - Product Identification

Product Name: MF-3F

Formula type: Mixture

Manufacturer's Information:

Mass Finishing Inc.

Emergency Telephone: 1-888-260-6277

1060 Commerce Blvd

Information: 320-543-3222

Howard Lake, MN 55349

Fax: 320-543-3355

Section 2 - Hazardous Ingredients

<u>INGREDIENTS</u>	<u>CAS #</u>	<u>% range</u>	<u>TLV</u>	<u>PEL</u>
Aluminum oxide	1344-28-1	1-6	10 mg/m ³	5 mg/m ³

Balance of ingredients are not defined as hazardous by OSHA

Comments TWA – Time Weighted Average is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded. STEL – Short Term Exposure Limit is the employee's 15-minute time weighted average exposure which shall not be exceeded at any time during a work day unless another time limit is specified.

Section 3 - Physical Data

Form:	Granulated Solid	pH:	None
Color:	Yellow	pH (1% vol):	None
Odor:	Mild	Solubility in Water:	No
Specific Gravity (Water = 1):	<1	Vapor Density (Air = 1):	ND
Boiling Point °F:	N/A	% VOC by weight:	ND
Evaporation Rate (Water = 1):	N/A	Vapor pressure:	ND

Section 4 - Fire and Explosion Information

Flash Point (Method) F:	>340 (COC)
Unusual Fire & Explosion Hazards:	No specific fire or explosion hazard. Smoke, fumes, hazardous decomposition products. Product is combustible (similar to sawdust)
Extinguishing Agents:	Foam, carbon dioxide, dry chemical, water fog, water
Fire fighting methods:	Evacuate area and fight fire from a safe distance. Fire fighters must wear MSHA/NIOSH approved positive pressure breathing apparatus with full face mask and full protective equipment.

Section 5 - Health Hazard Data - Signs and Symptoms of Overexposure

Probable Routes of Entry:	Eyes, skin, inhalation. Eye and skin irritant. See section 11: other effects for toxicity information.
Eyes:	Contact with eyes may cause minor irritation such as redness, tearing.
Skin:	This product contains materials that can cause slight skin irritation.
Inhalation:	Overexposure may cause throat, lung and nose irritation.
Ingestion:	Ingestion this product may cause nausea, vomiting and abdominal pain.
Medical Conditions Aggravated by Exposure:	Pre-existing disorders may be aggravated.

Section 6 - Emergency First Aid Procedures

Eyes:	Check for and remove contact lenses. Flush immediately with copious amounts of water for 15 minutes while holding eyelids apart to ensure complete irrigation of eye and eyelid tissues. If irritation develops, take exposed individual immediately to a health care professional, preferably an ophthalmologist, for emergency first aid and further evaluation.
Skin:	Wash exposed area with copious amounts of water. Repeat washing. If redness or irritation occurs, seek immediate medical attention. Launder contaminated clothing before reuse.
Inhalation:	If exposure by inhalation is suspected, move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty breathing, seek a health care professional immediately. Administer CPR if necessary.
Ingestion:	Do not induce vomiting unless directed by a physician. Obtain immediate medical aid or call poison control. During vomiting there is a danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Seek immediate medical attention or call 911. Never give anything by mouth to an unconscious person.

Section 7 - Reactivity Data

Stability:	Stable when stored and used under normal conditions.
Incompatibility:	Strong oxidizers, bases, reducing agents, and acids.
Hazardous Decomposition Products:	Thermal decomposition may release smoke, carbon dioxide, carbon monoxide, or other hazardous gases.
Hazardous Polymerization:	Will not occur.

Section 8 - Spill & Leak Procedures

Procedures for Cleanup:	Wear protective gear.
Small spills:	Sweep up and rinse with water.
Large Spills:	Ventilate area. Remove sources of ignition. Keep out of surface waters. Salvage for reuse if possible. Otherwise place into suitable container for disposal. Do not flush to sewers. Inform local pollution officials of spill. Call local regulatory agency.
Waste Disposal:	Contact the proper county, state or federal authorities.

Section 9 - Special Protection Information

Ventilation Type Required:	General or local
Protective Gloves:	Wear rubber, neoprene, or nitrile gloves
Respiratory Protection:	Not necessary under normal use conditions and ventilation. If dust is generated, wear NIOSH respirator for mists.
Eye Protection:	Wear safety glasses.
Other Equipment:	Water source for eye and skin wash. Rubber boots to keep feet dry in case of spill.

Section 10 - Special Precautions

Product should be stored in cool dry area. Store out of direct sunlight. Keep out of reach of children. Keep container closed when not in use. Thoroughly rinse empty containers before disposal. Use in well ventilated area. Do not breathe dust. Wash hands after handling.

Section 11 - Toxicity Data

<u>Toxicity</u>	<u>LD50 – Oral - rat</u>	<u>LD50 – skin absorption-rabbit</u>	<u>LC50 - Inhalation</u>
Aluminum oxide	ND	ND	ND
<u>Carcinogenicity</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Aluminum oxide	No	Yes	No
<u>Other effects:</u>	<u>Reproductive Toxicity</u>	<u>Teratogenicity</u>	<u>Mutagenicity</u>
Aluminum oxide	No	No	No

Section 12 - Ecological Information

Environmental toxicity & Fate: This product is not known to be hazardous and expected to readily biodegradable.

Section 13 - Hazard Rating - HMIS

0 = minimal	1 = slight	2 = moderate	3 = serious	4 = severe
Health: 1	Reactivity: 0	Fire: 0	Personal protection equipment: B	(gloves & glasses)

Section 14 - Regulatory Information

• Chemical Inventory Status - part 1 •

<u>Ingredient</u>	<u>TSCA</u>	<u>EC</u>	<u>Japan</u>	<u>Australia</u>
Aluminum oxide	Yes	Yes	Yes	Yes
<u>Ingredient</u>	<u>Korea</u>	<u>DSL</u>	<u>NDSL</u>	<u>Philippines</u>
Aluminum oxide	Yes	Yes	No	Yes

• **Federal, State & International Regulations – part 1 •**

<u>Ingredient</u>	---- SARA 302 ----		----- SARA 313 -----	
	<u>RQ</u>	<u>TPQ</u>	<u>List</u>	<u>Chemical Catg.</u>
Aluminum oxide	No	No	Yes	No

<u>Ingredient</u>	<u>CERCLA</u>	<u>RCRA 261.33</u>	<u>TSCA 8(d)</u>
	Aluminum oxide	No	No

Chemical weapon	No	TSCA 12(b): No	CDTA: No
SARA 311/312:	Acute: yes	Chronic: No	Fire: No
	Reactivity: No		Pressure: No

Section 15 - Shipping Name

Not DOT regulated

Section 16 - WHMIS

This material is classified as not hazardous under the WHMIS in Canada. This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Section 17 - Documentary Information

<i>Date issued:</i> 6/3/2008	<i>Supersedes:</i>	<i>Reason for update:</i>
<i>Prepared by:</i> S. VanGrasstek	<i>Title:</i>	<i>Phone:</i> 763-417-1380

<u>ABBREVIATIONS:</u>	NE = NOT ESTABLISHED	NDA = NO DATA AVAILABLE
> = GREATER THAN	<= LESS THAN	BCF = BIOCONCENTRATION FACTOR
NA = NOT APPLICABLE	ND = NO DATA	

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