

Issue date 24-Sep-2018

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Revision Number 2

1. IDENTIFICATION

Product identification

Product identifier Cronatron™ F53 Pot Metal Flux

Other means of identification CW1073

Recommended use Flux

Restrictions on use For industrial use only

Supplier

Corporate Headquarters:
Cronatron, A Lawson Brand
Lawson Products, Inc.
8770 W.Bryn Mawr Ave.- Suite 900
Chicago, IL 60631
1-866-529-7664

Canadian Distribution Center:
Lawson Canada
7315 Rapistan Court
Mississauga, ON L5N 5Z4
(800) 323-5922

24 Hour Emergency Phone Number (888) 426-4851 (Prosar)

2. HAZARD(S) IDENTIFICATION

Hazard Classification This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 3
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Corrosive to metals	Category 1
Hazardous to the aquatic environment	Category 1
Hazardous to the aquatic environment, long-term hazard	Category 1

Symbol



Signal word DANGER

Hazard statements H290 - May be corrosive to metals

H301 - Toxic if swallowed
 H302 - Harmful if swallowed
 H312 - Harmful in contact with skin
 H314 - Causes severe skin burns and eye damage
 H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H332 - Harmful if inhaled
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

General

P101 - If medical advice is needed, have product container or label at hand
 P102 - Keep out of reach of children
 P103 - Read label before use.

Prevention

P220 - Keep/Store away from clothing/ combustible materials
 P234 - Keep only in original container
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P264 - Wash hands thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area
 P273 - Avoid release to the environment

Response

Eyes

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Skin

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 P363 - Wash contaminated clothing before reuse

Inhalation

P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

Ingestion

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
 P321 - For Specific treatment see section 4 of this sds

Spill

P390 - Absorb spillage to prevent material damage
 P391 - Collect spillage

Storage

P405 - Store locked up
 P234 - Keep only in original container

Disposal

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Hazard(s) Not Otherwise Classified (HNOC)

None known.

Physical Hazards Not Otherwise Classified (PHNOC)

None known.

Unknown acute toxicity

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition Mixture.

Chemical name	CAS-No	Weight %
Aminoethylethanolamine	111-41-1	25-35
Triethanolamine	102-71-6	20-30
Ammonium Fluoroborate	13826-83-0	10-20
Zinc oxide	1314-13-2	0-10
Stannous fluoborate	13814-97-6	0-5
Fluoroboric acid	16872-11-0	0-10
Diethanolamine	111-42-2	0-10
Zinc fluoborate	13826-88-5	0-1

4. FIRST-AID MEASURES**Necessary first-aid measures**

General Information	Get immediate medical advice/attention.
Inhalation	Remove to fresh air. Call a physician immediately. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
Ingestion	Call a physician or Poison Control Center immediately. Seek medical advice and bring MSDS or label. Corrosive to nose, throat and respiratory system. May contain corrosive hydrofluoric acid solution.
Skin contact	Wash off immediately with plenty of water. Get medical attention if burns persist. May contain corrosive hydrofluoric acid solution. Product is corrosive.
Eye contact	Flush with plenty of warm water for at least 20 minutes. Seek medical attention IMMEDIATELY. Corrosive to the eyes and may cause severe damage including blindness. May contain corrosive hydrofluoric acid solution.
Most important symptoms (acute)	Irritation and corrosive action can occur in the mouth, stomach, tissue and digestive tract. Contact with eyes can cause possible blindness.
Most important symptoms (over-exposure)	Not available.
Indication of any immediate medical attention and special treatment needed	Not available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	In case of fire, use water spray (fog), foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Not applicable.
Specific hazards	Thermal decomposition can lead to release of irritating and toxic gases and vapors. Ammonia. Oxides of boron. Hydrogen fluoride fumes. Nitrogen oxides (NOx). Protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid. Hydrofluoric acid solution may be formed within water runoff.
Special protective equipment for fire-fighters	Wear self-contained breathing apparatus and protective clothing to protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid. Avoid spills and splashing of

opened products. Protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid. Hydrofluoric acid solution may be formed within water runoff.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Wear protective gloves/protective clothing/eye protection/face protection. Avoid dust formation. Avoid breathing dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Evacuate personnel to safe areas. Use personal protection recommended in Section 8. Contain the spill to prevent spread to drains, sewers, water supplies, or soil.

Methods and materials for containment and cleaning up

Do not allow product to reach sewage system, soil, surface or ground water, or any water course. Notify proper authorities if entry occurs. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. This material and its container must be disposed of as hazardous waste. Keep in suitable and closed containers for disposal. Place spilled material in a designated, labeled waste container. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

7. HANDLING AND STORAGE

Precautions for safe handling

Wash hands and face thoroughly after handling. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Avoid contact with eyes, skin, and clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Remove and wash contaminated clothing before re-use. Pre-existing respiratory conditions may be aggravated by exposure to this product.

Conditions for safe storage, including any incompatibilities

Store at temperatures between 35 degrees F and 100 degrees F. Keep material in its original container until ready to use. Keep container closed when not in use. Keep away from food, beverages, and feed. This material is hygroscopic.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Aminoethylethanolamine	-	-	0.1 mg/m ³ TWA
Triethanolamine	-	5 mg/m ³ TWA	-
Ammonium Fluoroborate	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA
Zinc oxide	5 mg/m ³ TWA 15 mg/m ³ TWA 5 mg/m ³ TWA	10 mg/m ³ STEL 2 mg/m ³ TWA	10 mg/m ³ STEL 5 mg/m ³ TWA
Stannous fluoborate	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA
Fluoroboric acid	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	-
Diethanolamine	-	1 mg/m ³ TWA Skin	3 ppm TWA 15 mg/m ³ TWA
Zinc fluoborate	-	-	2.5 mg/m ³ TWA

Appropriate engineering controls

General dilution and/or local exhaust ventilation in volume to keep PEL/TLV of most hazardous ingredient below acceptable limit and LEL below stated limit. Maintain air flow away from user to remove all fumes and vapors, so that the PEL is never exceeded. Ensure all national/local regulations are observed.

Individual protection measures, such as personal protective equipment

Eye protection

ANSI approved safety glasses or splash goggles are recommended.

Skin and body protection

Wear protective gloves and protective clothing. Nitrile gloves are recommended. Wear

appropriate clothing to prevent skin contact. Wash contaminated clothing before reuse. Gloves must be inspected regularly and prior to each use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Wash hands after handling the product.

Respiratory protection

Use a NIOSH/MSHA respirator unless adequate local exhaust is provided and air testing shows exposure levels are within recommended exposure guidelines. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling the product. Washing hands, face, neck and arms thoroughly before eating or smoking is recommended. When using, do not eat, drink or smoke.

**Canadian Province Occupational
Exposure Limits**

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundl and & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatche wan - OEL
Aminoethylethanola mine	-	-	-	-	-	-	-	-	-	-
Triethanolamine	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	0.5 ppm TWA 3.1 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA EV	10 mg/m ³ STEL 5 mg/m ³ TWA
Ammonium Fluoroborate	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA EV	5 mg/m ³ STEL 2.5 mg/m ³ TWA
Zinc oxide	10 mg/m ³ STEL 2 mg/m ³ TWA	10 mg/m ³ STEL 2 mg/m ³ TWA	2 mg/m ³ TWA 10 mg/m ³ STEL	10 mg/m ³ STEL 10 mg/m ³ TWA 5 mg/m ³ TWA	10 mg/m ³ STEL 2 mg/m ³ TWA	10 mg/m ³ STEL 2 mg/m ³ TWA	10 mg/m ³ STEL 2 mg/m ³ TWA	10 mg/m ³ STEL 2 mg/m ³ TWA	10 mg/m ³ STEL 10 mg/m ³ TWA EV 5 mg/m ³ TWA EV	10 mg/m ³ STEL 2 mg/m ³ TWA
Stannous fluoborate	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA 2.5 mg/m ³ TWA	2 mg/m ³ TWA EV 2.5 mg/m ³ TWA EV	4 mg/m ³ STEL 5 mg/m ³ STEL 2 mg/m ³ TWA 2.5 mg/m ³ TWA
Fluoroboric acid	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA	2.5 mg/m ³ TWA EV	5 mg/m ³ STEL 2.5 mg/m ³ TWA
Diethanolamine	2 mg/m ³ TWA	2 mg/m ³ TWA	1 mg/m ³ TWA	0.46 ppm TWA 2 mg/m ³ TWA	1 mg/m ³ TWA	1 mg/m ³ TWA	1 mg/m ³ TWA	1 mg/m ³ TWA	3 ppm TWA EV 13 mg/m ³ TWA EV	4 mg/m ³ STEL 2 mg/m ³ TWA
Zinc fluoborate	-	-	-	-	-	-	-	-	-	-

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Yellow
Odor	Ammonia
Odor threshold	Not applicable

pH	10-11
Melting point/range °C	Not applicable
Melting point/range °F	Not applicable
Boiling point/range °C	Not applicable
Boiling point/range °F	Not applicable
Flash point °C	>135
Flash point °F	>275
Flash point method used	Not available
Evaporation rate	Not applicable
Flammability (Solid, Gas)	Not available
Lower explosion limit	1.6 %
Upper explosion limit	10 %
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	1.3
Solubility	completely soluble in water
Partition coefficient (n-octanol/water)	Not applicable
Autoignition temperature °C	Not applicable
Autoignition temperature °F	Not applicable
Decomposition temperature °C	Not available
Decomposition temperature °F	Not available
Viscosity	Not available

10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Not applicable.
Conditions to avoid	Keep from excessive heat. Thermal decomposition can lead to release of toxic/corrosive gases and vapors.
Incompatible materials	Incompatible with strong acids and bases. Strong oxidizing agents. Sulfides. Cyanides.
Hazardous decomposition	Fluxes may give off ammonia, hydrofluoric acid and boron trifluoride fumes upon

products decomposition at high temperatures. Corrosive vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure Dermal. Eyes. Ingestion. Inhalation.

Symptoms Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea. Irritation and corrosive action can occur in the mouth, stomach, tissue and digestive tract. Ingestion may result in nausea, vomiting, diarrhea and pain. Exposure to extremely high levels of fluorides can cause abdominal pain, diarrhea, muscular weakness, and convulsions. In extreme cases it can cause loss of consciousness and death. Harmful if absorbed through the skin or inhaled. Inhalation may irritate the mucous membranes of the nose, throat, bronchi and lungs. Exposure to the fluoride ion may cause hypocalcemia-calcium deficiency in the blood that can result in muscle cramps and inflammation and necrosis of mucous membranes. Contact may cause tearing, redness, a stinging or burning feeling, swelling and blurred vision. Corrosive to the eyes and may cause severe damage including blindness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure Overexposure to fluorides can cause serious bone erosion, excessive calcification of the bone and calcification of the ribs, pelvis, and spinal column. May cause skin rash.

Numerical measures of toxicity

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Aminoethylethanolamine	-	= 3560 µL/kg (Rabbit)	= 2000 mg/kg (Rat)
Triethanolamine	-	> 16 mL/kg (Rat) > 20000 mg/kg (Rabbit)	= 4190 mg/kg (Rat)
Ammonium Fluoroborate	-	-	-
Zinc oxide	-	-	> 5000 mg/kg (Rat)
Stannous fluoborate	-	-	-
Fluoroboric acid	-	-	100 - 200 mg/kg (Rat) = 100 mg/kg (Rat)
Diethanolamine	-	= 11.9 mL/kg (Rabbit) = 7640 µL/kg (Rabbit)	= 620 µL/kg (Rat) = 780 mg/kg (Rat)
Zinc fluoborate	-	-	-

ATEmix (dermal) Not available

ATEmix (oral) Not available

ATEmix (inhalation-gas) Not available

ATEmix (inhalation-vapor) Not available

ATEmix (inhalation-dust/mist) Not available

Carcinogenicity

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
Aminoethylethanolamine	-	-	-	-
Triethanolamine	-	Group 3	-	-

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
Ammonium Fluoroborate	A4	Group 3	-	-
Zinc oxide	-	-	-	-
Stannous fluoborate	A4	-	-	-
Fluoroboric acid	A4	-	-	-
Diethanolamine	A3	Group 2B	Listed	-
Zinc fluoborate	-	Group 3	-	-

Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Aminoethylethanolamine	-	-	-	-	-	-
Triethanolamine	-	-	-	-	-	-
Ammonium Fluoroborate	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Zinc oxide	-	-	-	-	-	-
Stannous fluoborate	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Fluoroboric acid	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Diethanolamine	-	IARC 2B	ACGIH A3	-	ACGIH A3	-
Zinc fluoborate	-	-	-	-	-	-

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish
Aminoethylethanolamine	210: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	728: 96 h <i>Pimephales promelas</i> mg/L LC50
Triethanolamine	216: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 169: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	10600 - 13000: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 1000: 96 h <i>Pimephales promelas</i> mg/L LC50 static 450 - 1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static
Ammonium Fluoroborate	-	-
Zinc oxide	-	-
Stannous fluoborate	-	-
Fluoroboric acid	-	2600: 96 h <i>Brachydanio rerio</i> mg/L LC50 static 20: 72 h <i>Carassius auratus</i> mg/L LC50
Diethanolamine	7.8: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 2.1 - 2.3: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	4460 - 4980: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 1200 - 1580: 96 h <i>Pimephales promelas</i> mg/L LC50 static 600 - 1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static
Zinc fluoborate	-	-

Persistence and degradability Not available.

Bioaccumulation

Chemical name	CAS-No	Partition coefficient (log Kow)
Aminoethylethanolamine 111-41-1	111-41-1	-1.46

Chemical name	CAS-No	Partition coefficient (log Kow)
Triethanolamine 102-71-6	102-71-6	-2.53
Ammonium Fluoroborate 13826-83-0	13826-83-0	-
Zinc oxide 1314-13-2	1314-13-2	-
Stannous fluoborate 13814-97-6	13814-97-6	-
Fluoroboric acid 16872-11-0	16872-11-0	-
Diethanolamine 111-42-2	111-42-2	-2.18 25 °C
Zinc fluoborate 13826-88-5	13826-88-5	-

Mobility in soil This product is mobile in soil.

Other adverse effects Not available

13. DISPOSAL CONSIDERATIONS

Disposal information Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose in accordance with local, state and federal regulations. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Dispose of via licensed waste disposal contractor.

Contaminated packaging Dispose in accordance with local, state and federal regulations.

14. TRANSPORTATION INFORMATION

Shipping Descriptions

DOT

ID-No UN1760
 Proper shipping name Corrosive liquid, n.o.s. (aminoethanolamine, ammonium fluoroborate)
 Hazard Class(es) 8
 Packing group II
 Special Provisions LTD QTY

TDG

ID-No UN1760
 Proper shipping name Corrosive liquid, n.o.s. (aminoethanolamine, ammonium fluoroborate)
 Hazard Class(es) 8
 Packing group II
 Special Provisions LTD QTY

IATA

ID-No UN1760
 Proper shipping name Corrosive liquid, n.o.s. (aminoethanolamine, ammonium fluoroborate)
 Hazard Class(es) 8
 Packing group II

IMDG/IMO

ID-No UN1760
 Proper shipping name Corrosive liquid, n.o.s. (aminoethanolamine, ammonium fluoroborate)
 Hazard Class(es) 8
 Packing group II
 EmS No F-A, S-B

Special Provisions

LTD QTY

Marine Pollutants

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
Aminoethylethanolamine	111-41-1	-	-	-
Triethanolamine	102-71-6	-	-	-
Ammonium Fluoroborate	13826-83-0	-	-	-
Zinc oxide	1314-13-2	-	-	-
Stannous fluoborate	13814-97-6	-	-	-
Fluoroboric acid	16872-11-0	-	-	-
Diethanolamine	111-42-2	-	-	-
Zinc fluoborate	13826-88-5	-	-	-

Special Precautions

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Multi-modal shipping descriptions are provided for informational purposes and do not consider container size. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

15. REGULATORY INFORMATION

State regulations

U.S. state Right-to-Know regulations

Chemical name	CAS-No	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK
Aminoethylethanolamine	111-41-1	X	X	X
Triethanolamine	102-71-6	X	X	X
Ammonium Fluoroborate	13826-83-0	X	X	X
Zinc oxide	1314-13-2	X	X	X
Stannous fluoborate	13814-97-6	-	X	-
Fluoroboric acid	16872-11-0	-	X	-
Diethanolamine	111-42-2	X	X	X
Zinc fluoborate	13826-88-5	-	X	X

California Prop. 65

WARNING: This product contains a chemical(s) known to the state of California to cause cancer

Chemical name	CAS-No	California Prop. 65
Aminoethylethanolamine	111-41-1	-
Triethanolamine	102-71-6	-
Ammonium Fluoroborate	13826-83-0	-
Zinc oxide	1314-13-2	-
Stannous fluoborate	13814-97-6	-
Fluoroboric acid	16872-11-0	-

Chemical name	CAS-No	California Prop. 65
Diethanolamine	111-42-2	Carcinogen
Zinc fluoborate	13826-88-5	-

U.S. Federal Regulations

US EPA SARA 313

Chemical name	CAS-No	CERCLA/SARA Hazardous Substances RQ	SARA 313 - Threshold Values
Aminoethylethanolamine	111-41-1	-	-
Triethanolamine	102-71-6	-	-
Ammonium Fluoroborate	13826-83-0	5000 lb 2270 kg	1.0 %
Zinc oxide	1314-13-2	-	1.0 %
Stannous fluoborate	13814-97-6	-	-
Fluoroboric acid	16872-11-0	-	-
Diethanolamine	111-42-2	100 lb 45.4 kg	1.0 %
Zinc fluoborate	13826-88-5	-	1.0 %

US EPA SARA 311/312
hazardous categorization

Not applicable

International inventories

All components of this product are listed on the following inventories: U.S.A. (TSCA 8(b)), Canada (DSL/NDSL) or are exempt.

Chemical name	DSL/NDSL	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification
Aminoethylethanolamine	X	X	-
Triethanolamine	X	X	-
Ammonium Fluoroborate	X	X	-
Zinc oxide	X	X	-
Stannous fluoborate	X	X	-
Fluoroboric acid	X	X	-
Diethanolamine	X	X	-
Zinc fluoborate	X	X	-

Legend X - Listed

16. OTHER INFORMATION

NFPA

Health	3
Flammability	0
Instability	0

HMIS

Health	3
Flammability	0
Physical hazards	0

Notice: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

Prepared by Regulatory Affairs

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Revision note

Key to abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists)
ATE (Average Toxicity Estimate)
DSL/NDSL (Domestic Substance List/Non-Domestic Substance List)
HMIS (Hazardous Materials Identification System)
IARC (International Agency for Research on Cancer)
IATA (International Air Transport Association)
IMDG/IMO (International Maritime Dangerous Goods/International Maritime Organization)
NFPA (National Fire Protection Association)
NTP (National Toxicology Program)
OEL (Occupational Exposure Level)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
TSCA (Toxic Substance Control Act)
USEPA (United States Environmental Protection Agency)

Disclaimer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

End of Safety Data Sheet