



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name FORMULA 815 MX SC
Product number 192017
Company information Brulin & Company, Inc.
P.O. Box 270
Indianapolis, IN 46206 US
www.Brulin.com
Emergency CHEMTREC 1-800-424-9300
General information Phone: 317-923-3211
Fax: 317-925-4596

2. Hazards Identification

Emergency overview Contact with this material can cause irritation to the skin, eyes and mucous membranes. May cause long-term adverse effects in the aquatic environment. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Potential health effects

- Eyes** This product may cause irritation to the eyes.
- Skin** Prolonged skin contact may cause skin irritation.
- Inhalation** Prolonged or excessive inhalation may cause respiratory tract irritation.
- Ingestion** May cause temporary irritation of the throat, stomach, and gastrointestinal tract.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethanolamine	141-43-5	< 5
Phosphoric acid	7664-38-2	< 2.5
Potassium hydroxide	1310-58-3	< 2.5
Non-hazardous and other components below reportable levels		< > 90

4. First Aid Measures

First aid procedures

- Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.
- Skin contact** Wash with soap and water. Launder contaminated clothing before reuse. Get medical attention if irritation develops or persists.
- Ingestion** Do not induce vomiting. If conscious, drink plenty of water. If symptoms persist, get medical attention.
- Inhalation** Remove to fresh air. If symptoms persist, get medical attention.

Notes to physician Symptoms may be delayed.

General advice Immediate medical attention is required. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

5. Fire Fighting Measures

Flammable properties None known.

Extinguishing media

- Suitable extinguishing media** Use any media suitable for the surrounding fires.

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6. Accidental Release Measures

Personal precautions	Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Methods for containment	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Never return spills in original containers for re-use. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean contaminated surface thoroughly.

7. Handling and Storage

Handling	Do not get this material in your eyes, on your skin, or on your clothing. Do not breathe gas/fumes/vapor/spray. Avoid contact with skin and eyes.
Storage	Keep container tightly closed. Keep out of the reach of children. Keep from freezing.

8. Exposure Controls / Personal Protection

Personal protective equipment	
Eye / face protection	Wear chemical goggles. or Safety glasses. or Face-shield.
Skin protection	Wear appropriate chemical resistant gloves.
Respiratory protection	Not normally needed. If ventilation is not sufficient to effectively prevent buildup of aerosols or mists, appropriate NIOSH/MSHA respiratory protection must be provided.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	clear liquid
Color	blue green
Odor	citrus
Odor threshold	Not available.
Form	liquid
pH	12 - 12.5
Freezing point	109.4 °F (42.5 °C) estimated
Boiling point	Not available.
Flash point	> 212 °F (> 100 °C) Pensky-Martens Closed Cup
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor density	Not available.
Specific gravity	1.151
Solubility (water)	Not available.
VOC	3.717 % estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Do not freeze.
Incompatible materials	Strong oxidizing agents. and acids
Hazardous decomposition products	Carbon dioxide, carbon monoxide, oxides of sulfur and nitrogen.

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Possibility of hazardous reactions Will not occur.

11. Toxicological Information

Acute effects Acute LD50: 7748 mg/kg, Rat, Oral
Acute LD50: 45470 mg/kg, Rat, Dermal
Causes burns.

Chronic effects Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood.
Prolonged exposure may cause chronic effects.

Further information Symptoms may be delayed.

12. Ecological Information

Not available.

13. Disposal Considerations

Disposal instructions Dispose in accordance with all applicable regulations. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

14. Transport Information

DOT

Not regulated as hazardous goods.

IATA

Not regulated as hazardous goods.

IMDG

Not regulated as hazardous goods.

ICAO

Not regulated as hazardous goods.

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA (Superfund) reportable quantity

Phosphoric acid: 5000.0000

Potassium hydroxide: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes

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Country(s) or region	Inventory name	On inventory (yes/no)*
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

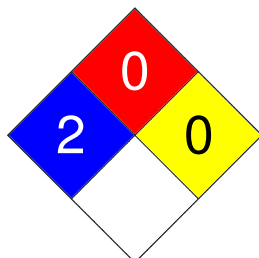
Ethanolamine (141-43-5)	Listed.
Phosphoric acid (7664-38-2)	Listed.
Potassium hydroxide (1310-58-3)	Listed.

16. Other Information

HMIS rating

Health	/ 2
Flammability	0
Physical Hazard	0
Personal Protection	B

NFPA codes



Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

Regulatory Information: United States

This data sheet contains changes from the previous version in section(s):

Issue date

09-26-2013