



## 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.

## FORMULA 815 MX SC

Product number: 192017

### 6. Accidental Release Measures

<b>Personal precautions</b>	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.
<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	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

<b>Handling</b>	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.
<b>Storage</b>	Keep container tightly closed. Keep out of the reach of children. Keep from freezing.

### 8. Exposure Controls / Personal Protection

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

### 9. Physical & Chemical Properties

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

### 10. Chemical Stability & Reactivity Information

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

# FORMULA 815 MX SC

Product number: 192017

**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

# FORMULA 815 MX SC

Product number: 192017

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

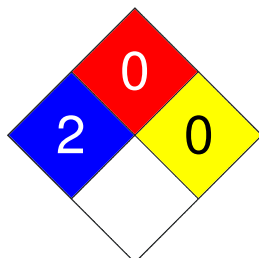
Ethanolamine (141-43-5)	Listed.
Phosphoric acid (7664-38-2)	Listed.
Potassium hydroxide (1310-58-3)	Listed.

## 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