



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	BRULIN 63-G
Product number	432001
Revision date	28-Mar-2006
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	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Prolonged exposure may cause chronic effects. Causes severe skin and eye burns. Harmful if swallowed.
Potential short term health effects	
Routes of exposure	Inhalation. Skin contact. Eye contact Ingestion.
Eyes	Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness.
Skin	Causes severe skin irritation.
Inhalation	Harmful if inhaled. Do not breathe gas/fumes/vapor/spray.
Ingestion	Harmful if swallowed. Irritating to mouth, throat, and stomach. Do not ingest.
Target organs	Eyes. Respiratory system. Skin.

3. Composition / Information on Ingredients

Hazardous component(s)	CAS #	Percent
Potassium hydroxide	1310-58-3	< 2.5
Sodium nitrite	7632-00-0	< 10
Sodium Tripolyphosphate	7758-29-4	< 10
Sodium metasilicate	6834-92-0	< 1

4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention if irritation develops or persists.
Skin contact	Immediately flush skin with running water for at least 20 minutes. Launder contaminated clothing before reuse. Get medical attention if irritation develops or persists.
Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Call a physician if symptoms develop or persist.
Ingestion	Immediately give large quantities of water to drink. Do not induce vomiting without medical advice. Get medical attention immediately.
Notes to physician	Symptoms may be delayed.
General advice	If you feel unwell, seek medical advice (show the label where possible).

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5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media Small Fires: Dry chemical, CO₂, water spray or regular foam.

Large Fires: Water spray, fog or regular foam.

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.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

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.

Large Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Dike far ahead of liquid spill for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly. Should not be released into the environment. Soak up with inert absorbent material and dispose of as hazardous waste.

7. Handling and Storage

Handling

Handle and open container with care. Do not breathe gas/fumes/vapor/spray. Avoid contact with skin and eyes.

Storage

Keep out of the reach of children. Keep at temperatures between 4 and 43°C.

8. Exposure Controls / Personal Protection

Exposure guidelines

ACGIH - Threshold Limits Values - Ceilings (TLV-C)

Potassium hydroxide 1310-58-3 2 Mg/m³ Ceiling

ACGIH - Threshold Limits Values - TLV Basis - Critical Effects

Potassium hydroxide 1310-58-3 irritation; corrosion

Personal protective equipment

Eye / face protection Goggles. or face-shield

Skin protection Avoid contact with the skin. Wear appropriate chemical resistant gloves.

Respiratory protection Not normally needed. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes.

9. Physical & Chemical Properties

Appearance Not available

Clarity Not available

Color light yellow

Form Liquid.

Odor mild

Odor threshold Not available

Physical state Liquid

pH 13.5

Melting point 30 °F

Freezing point Not available

Boiling point 212 °F

Flash point > 212

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Evaporation rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	17
Vapor density	0.6
Specific gravity	1.133
Relative density	Not available
Solubility (H ₂ O)	100 %
Octanol/H ₂ O coeff	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
VOC (Weight %)	0 %

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	None known.
Incompatible materials	Incompatible with strong acids and oxidizing agents.
Hazardous decomposition products	At thermal decomposition temperatures, carbon monoxide and carbon dioxide. and nitrogen oxides (NO _x)
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Acute effects	Acute LD50: 1513 mg/kg, Rat, Oral Acute eye irritation/corrosion
Local effects	Harmful if swallowed.
Chronic effects	Prolonged exposure may cause chronic effects.

12. Ecological Information

Ecotoxicity	Components of this product are hazardous to aquatic life.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. Disposal Considerations

Waste codes	D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]
Disposal instructions	Dispose in accordance with all applicable regulations. This material and its container must be disposed of as hazardous waste. Do not dispose of waste into sewer.

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14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Corrosive liquids, n.o.s. (POTASSIUM HYDROXIDE RQ = 23.0000 lbs, SODIUM METASILICATE)
Hazard class	8
UN number	UN1760
Packaging group	II

Additional information:

Special provisions	B2, IB2, T11, TP2, TP27
Packaging exceptions	154
Packaging non bulk	202
Packaging bulk	242
ERG number	154

DOT



Department of Transportation (DOT) Requirements NON-BULK

Basic shipping requirements:

Proper shipping name	Corrosive liquids, n.o.s. (POTASSIUM HYDROXIDE RQ = 23.0000 lbs, SODIUM METASILICATE)
Hazard class	8
UN number	UN1760
Packaging group	II

Additional information:

Special provisions	B2, IB2, T11, TP2, TP27
Packaging exceptions	154
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DOT NON-BULK



IATA

Basic shipping requirements:

Proper shipping name	Corrosive liquid, n.o.s. (POTASSIUM HYDROXIDE, SODIUM METASILICATE)
Hazard class	8
UN number	UN1760
Packaging group	II

Additional information:

Packaging exceptions	154
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IATA



IMDG

Basic shipping requirements:

Proper shipping name	CORROSIVE LIQUID, N.O.S. (POTASSIUM HYDROXIDE, SODIUM METASILICATE)
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Additional information:

Packaging exceptions	154
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IMDG



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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.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

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

Australia

Canada

China

Korea

Philippines

United States & Puerto Rico

Inventory name

Australian Inventory of Chemical Substances (AICS)

Domestic Substances List (DSL)

Inventory of Existing Chemical Substances in China (CCS)

Korean Inventory of Chemicals (KICS)

Philippine Inventory of Chemicals and Chemical Substances (PICCS)

Toxic Substances Control Act (TSCA) Inventory

International regulations

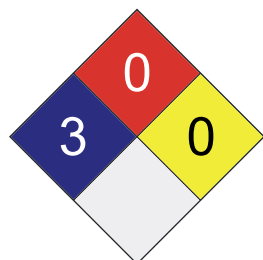
The product is classified and labelled in accordance with EC directives or respective national laws.

16. Other Information

HMIS rating

Health	/ 3
Flammability	0
Physical Hazard	0
Personal Protection	B

NFPA codes



Prepared date

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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.