



SAFETY DATA SHEET

1. Identification

Product identifier	MAXIMA 128	
Other means of identification		
Product number	161041 / 161009	
Recommended use	Disinfectant Cleaner	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	Brulin & Company, Inc.	
Address	P.O. Box 270 Indianapolis, IN 46206 United States	
Telephone	Phone:	317-923-3211
	Fax:	317-925-4596
Website	www.Brulin.com	
Emergency phone number	CHEMTREC	1-800-424-9300

2. Hazard(s) identification

Physical hazards	Not classified.		
Health hazards	Acute toxicity, oral	Not classified	
	Acute toxicity, dermal	Not classified	
	Skin corrosion/irritation	Category 2	
	Serious eye damage/eye irritation	Category 2A	
OSHA defined hazards	Not classified.		
Label elements			
Signal word	Warning		
Hazard statement	Causes skin irritation. Causes serious eye irritation.		
Prevention	Wear safety glasses with side shields (or goggles). Wash hands thoroughly after handling. Wear protective gloves.		
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.		
Storage	Store away from incompatible materials. Do not freeze. Keep out of the reach of children.		
Disposal	Dispose of waste and residues in accordance with local authority requirements.		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	None known.		

3. Composition/information on ingredients**Mixtures**

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Chemical name	CAS number	% by weight
CITRIC ACID, USP FINE GRANULATED	77-92-9	1 - <5
Didecyldimethylammonium chloride	7173-51-5	1 - <5
Diocetyl Dimethyl Ammonium Chloride	5538-94-3	1 - <5
Ethyl Hydroxide	64-17-5	1 - <5
N-Alkyl(C14 50%, C12 40%, C16 10%)-N,N-dimethyl-N-benzylammonium Chloride	68424-85-1	1 - <5
Octyl Decyl Dimethyl Ammonium Chloride	32426-11-2	1 - <5

4. First-aid measures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Notes to physician	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Should not be released into the environment. Collect spillage. Dike far ahead of spill for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling	Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Do not mix with other chemicals. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep at temperatures between 4 and 49C. Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
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Ethyl Hydroxide (CAS 64-17-5)	STEL	1000 ppm
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Control parameters**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Ethyl Hydroxide (CAS 64-17-5)	PEL	1900 mg/m ³
		1000 ppm

Appropriate engineering controls Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance clear

Form Liquid.

Color green

Odor pleasant sassafras

Odor threshold Not available.

pH 0.8 - 1.9

Melting point/freezing point 32 °F (0 °C)

Boiling point 212 °F (100 °C)

Flash point None to Boiling

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Solubility(ies)

Solubility (water) 100 %

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

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Viscosity	Not available.
Specific gravity	1.01
VOC (Weight %)	1.1 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials. Do not freeze. Do not mix with other chemicals.
Incompatible materials	Incompatible with bases. This product may react with reducing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Toxicological data

Product	Test Results
MAXIMA 128 (Mixture)	Acute Dermal LD50 Rabbit: > 5000 mg/kg Acute Oral LD50 Rat: 7410 mg/kg

Information on likely routes of exposure

Eye contact	Causes serious eye irritation.
Skin contact	Causes skin irritation.
Ingestion	Expected to be a low ingestion hazard.
Inhalation	No adverse effects due to inhalation are expected.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Chronic effects	Prolonged inhalation may be harmful.
Toxicological information	Occupational exposure to the substance or mixture may cause adverse effects.

12. Ecological information

Ecotoxicity	Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected. Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

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Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.
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14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous 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.
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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA (Superfund) reportable quantity

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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SARA 302 Extremely hazardous substance	No
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SARA 311/312 Hazardous chemical	No
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SARA 313 (TRI reporting)	Not regulated.
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Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.
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US state regulations

US. Massachusetts RTK - Substance List

Ethyl Hydroxide (CAS 64-17-5)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Ethyl Hydroxide (CAS 64-17-5)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
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). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	07-08-2014
Revision date	02-13-2015
Version #	02
Further information	This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: DANGER CORROSIVE Causes irreversible eye damage and skin burns. Harmful if swallowed.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available. 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.