



SAFETY DATA SHEET

Issue Date 29-Mar-2016

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Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name Muscle

Other means of identification

Product Code 2980000201

Synonyms None

Details of the supplier of the safety data sheet

Company Name Runge Paper Company
Division of Warehouse Direct
2001 S. Mount Prospect Road
Des Plaines, IL 60018
(800) 858-1180

Emergency telephone number

Emergency Telephone 800-858-1180

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

Causes severe skin burns and eye damage



Appearance Clear Violet

Physical state Liquid

Odor Sassafras

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

Specific Treatment (See Section 4 on the SDS)

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

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Drink plenty of water

Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

Unknown Acute Toxicity

0.0211% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
2-(2-butoxyethoxy)ethanol	112-34-5	1-5	*
2-butoxyethanol	111-76-2	1-5	*
Sodium Metasilicate	6834-92-0	1-5	*
Surfactant Blend	Proprietary	1-5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First aid measures****General advice**

Immediate medical attention is required.

Skin Contact

Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Eye contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.

Inhalation

Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion

Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.

Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-(2-butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm inhalable fraction and vapor	-	-
2-butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Sodium Hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls**Engineering Controls**

Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Tight sealing safety goggles. Face protection shield.

Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene

When using do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear Violet
Color	Violet
Odor	Sassafras
Odor threshold	No Information available

Property**Values****Remarks • Method**

pH	12.5 - 13.5	
Specific Gravity	1.017	
Viscosity	<25 cP @ 25°C	
Melting point/freezing point	No Information available	
Flash point	None	

Boiling point / boiling range	100 °C / 212 ° F Degrees	
Evaporation rate	No Information available	
Flammability (solid, gas)	No data available	
Flammability Limits in Air		Not Applicable
Upper flammability limit:	No Information available	
Lower flammability limit:	No Information available	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	Complete	
Partition coefficient	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	

Other Information

Density Lbs/Gal	8.5
VOC Content (%)	6

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	Harmful by inhalation and in contact with eyes and skin.
Inhalation	May cause irritation of respiratory tract.
Eye contact	Avoid contact with eyes. Corrosive. Direct contact may cause serious eye irritation. Causes severe eye damage.
Skin Contact	Avoid contact with skin. May cause severe irritation or burns to the skin. Prolonged or repeated contact may cause absorption to the skin.
Ingestion	Harmful if swallowed. Can burn mouth, throat, and stomach.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-(2-butoxyethoxy)ethanol 112-34-5	= 5660 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-
2-butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
Sodium Metasilicate 6834-92-0	= 1153 mg/kg (Rat)	-	-
Surfactant Blend	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

Information on toxicological effects

Symptoms	No Information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No Information available.
Germ cell mutagenicity No Information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-butoxyethanol 111-76-2	A3	Group 3	-	-

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 - Not classifiable as a human carcinogen

Reproductive toxicity No Information available.
STOT - single exposure No Information available.
STOT - repeated exposure No Information available.
Chronic toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.
Target organ effects Blood, Central nervous system, EYES, hematopoietic system, Kidney, Liver, Respiratory system, Skin.
Aspiration hazard No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0.0211% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 14,372.00
ATEmix (dermal) 26,318.00
ATEmix (inhalation-dust/mist) 75.00
ATEmix (inhalation-vapor) 22,500.00

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0.0211% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-(2-butoxyethoxy)ethanol 112-34-5	100: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	1300: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	2850: 24 h <i>Daphnia magna</i> mg/L EC50 100: 48 h <i>Daphnia magna</i> mg/L EC50
2-butoxyethanol 111-76-2	-	1490: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2950: 96 h <i>Lepomis macrochirus</i> mg/L LC50	1000: 48 h <i>Daphnia magna</i> mg/L EC50 1698 - 1940: 24 h <i>Daphnia magna</i> mg/L EC50
Sodium Metasilicate 6834-92-0	-	210: 96 h <i>Brachydanio rerio</i> mg/L LC50 210: 96 h <i>Brachydanio rerio</i> mg/L LC50 semi-static	216: 96 h <i>Daphnia magna</i> mg/L EC50
Surfactant Blend	-	1.2: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50	5.3: 48 h <i>Daphnia</i> mg/L LC50
Tetrasodium EDTA 64-02-8	1.01: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	59.8: 96 h <i>Pimephales promelas</i> mg/L LC50 static 41: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	610: 24 h <i>Daphnia magna</i> mg/L EC50
Sodium Hydroxide 1310-73-2	-	45.4: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	-
Trisodium nitrilotriacetate 5064-31-3	560 - 1000: 96 h <i>Chlorella vulgaris</i> mg/L EC50	72 - 133: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 175 - 225: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 252: 96 h <i>Lepomis macrochirus</i> mg/L LC50 470: 96 h <i>Pimephales promelas</i> mg/L LC50 static 93 - 170: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 560 - 1000: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 560 - 1000: 96 h <i>Poecilia reticulata</i> mg/L LC50	560 - 1000: 48 h <i>Daphnia magna</i> mg/L LC50

		114: 96 h Pimephales promelas mg/L LC50 560 - 1000: 96 h Oryzias latipes mg/L LC50 560 - 1000: 96 h Oryzias latipes mg/L LC50 semi-static	
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Persistence and degradability

No Information available.

Bioaccumulation

Bioaccumulative potential.

Chemical Name	Partition coefficient
2-butoxyethanol 111-76-2	0.81

Other adverse effects

No Information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

Not regulated

TDG

Not regulated

15. REGULATORY INFORMATION**International Inventories****TSCA**

Complies

DSL/NDL

Complies

Legend:**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-(2-butoxyethoxy)ethanol - 112-34-5	1.0
2-butoxyethanol - 111-76-2	1.0

SARA 311/312 Hazard Categories**Acute health hazard**

Yes

Chronic Health Hazard

Yes

Fire hazard

No

Sudden release of pressure hazard
Reactive Hazard

No
No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Trisodium nitrilotriacetate - 5064-31-3	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-(2-butoxyethoxy)ethanol 112-34-5	X	-	-
2-butoxyethanol 111-76-2	X	X	X
Sodium Hydroxide 1310-73-2	X	X	X
Trisodium nitrilotriacetate 5064-31-3	-	X	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA	Health hazards 3	Flammability 1	Instability 0	Physical and Chemical Properties Yes
HMIS	Health hazards 3	Flammability 1	Physical hazards 0	Personal protection B

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Revision Note

No Information available

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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.

End of Safety Data Sheet