

SAFETY DATA SHEET

Issuing date 13-Sept-2017

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Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Label Name	Flex Low VOC
Other means of identification	
UPC Code(s)	Not applicable
Product code	CC23
UN/ID No	UN3266
Synonyms	None

Recommended use of the chemical and restrictions on use

Recommended Use	
Uses advised against	

Free rinsing every day traffic lane preconditioning Follow label instructions. Not recommended for any use except intended use.

Supplier's details

Supplier Address
Bridgepoint Systems
4282 South 590 West
Salt Lake City, UT 84123
USA

Manufacturer Address Bridgewater 4282 South 590 West Salt Lake City, UT 84123 USA

Emergency telephone number

Company Phone Number Company Emergency Phone Number Emergency telephone 1-800-658-5314 United States: 1-800-535-5053 (INFOTRAC – 24 hours, 7 days a week) International: 1-352-323-3500 (INFOTRAC – 24 hours, 7 days a week) Poison Control 1-800-222-1222 (24 hour)

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 - Inhalation (Gases)	Category 4
	Calegoly 4
Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1C

GHS Label elements, including

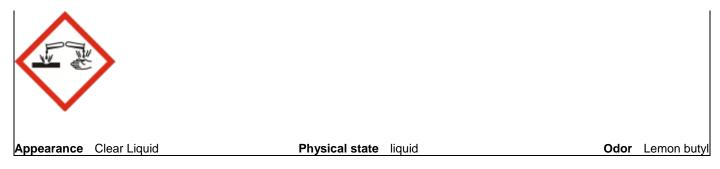
precautionary statements

Emergency Overview

Danger

Hazard Statements

Harmful if inhaled Causes severe skin burns and eye damage



Precautionary Statements - Prevention

Use only outdoors or in a well-ventilated area 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 Call a POISON CENTER or doctor/physician if you feel unwell IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing 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 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

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

- May be harmful in contact with skin
- May cause respiratory irritation
- May be harmful if swallowed General Hazards
 Keep out of reach of children

Please see Section 11. Toxicological Information for further information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Butoxyethanol	111-76-2	1 - 5	*
Lauramine Oxide	1643-20-5	1 - 5	*
Sodium Hydroxide	1310-73-2	1 - 5	*

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

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice Immediate medical attention is required.

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.

Skin contact	If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.			
Toxic - Inhalation	Move 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.			
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.			
Most important symptoms/effects, acute and delayed				
Main Symptoms	No information available.			
Indication of immediate medical attention and special treatment needed, if necessary				
Notes to physician	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 gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Hazardous Combustion No information available. Products

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. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.
Other information	Refer to protective measures listed in Sections 7 and 8.
Advice for emergency responders	For personal protection see section 8.
Environmental precautions	

Environmental precautions	Do not allow material to contaminate ground water system. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.		
Methods and materials for containm	ent 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	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery.		

 Conditions for safe storage, including any incompatibilities

 Technical measures/Storage
 Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in property labeled containers

conditions	weil-ventilated place. Keep in propeny labeled containers.		
Packaging material	Keep product in packaging product is initially sold in.		
Incompatible products	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
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 Exposure Guidelines 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 Measures Showers Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin and body protection	Protective gloves
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.
Hygiene measures	Remove and wash contaminated clothing before re-use. 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. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. For environmental protection, remove and wash all contaminated protective equipment before re-use. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state Appearance Color	liquid Clear Liquid No information available	Odor Odor threshold	Lemon butyl No information available
<u>Property</u> pH Melting point Boiling point/boiling range Flash Point	<u>Values</u> 13.0 No information available > 100 °C / > 212 °F > 94 °C / > 201 °F	Remarks • Method	
Evaporation rate Flammability (solid, gas) Flammability Limits in Air Upper Flammability Limit	No information available No information available No information available		
Lower Flammability Limit Vapor pressure Vapor density Specific Gravity	No information available 17.5 0.691 1.040		
Water solubility Solubility in other solvents Partition coefficient: n-octanol/wate Autoignition temperature	> 426 °C / > 800 °F	No information available	
Decomposition temperature Viscosity, kinematic Viscosity, dynamic Explosive properties Oxidizing Properties	No information available No information available No information available No information available No information available	200 cps	
Other information			
Softening point Molecular weight VOC Content(%) Density VALUE Bulk Density VALUE	No information available No information available No information available No information available No information available		

10. STABILITY AND REACTIVITY

Reactivity

<u>Chemical stability</u> Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization 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 gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Toxic - Inhalation	Harmful by inhalation. Toxic by inhalation. Avoid breathing vapors or mists. May cause irritation of respiratory tract.
Eye contact	Avoid contact with eyes. Risk of serious damage to eyes. May cause burns. May cause irreversible damage to eyes.
Skin contact	Irritating to skin. Avoid contact with skin. Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking. May cause burns.
Ingestion	Do not taste or swallow. Ingestion may cause irritation to mucous membranes. Ingestion causes burns of the upper digestive and respiratory tracts.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 220 mg/kg (Rabbit)	= 450 ppm (Rat)4 h
Sodium Hydroxide 1310-73-2		= 1350 mg/kg (Rabbit)	

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Eye damage/irritation Sensitization Germ Cell Mutagenicity Carcinogenicity	No information available. No information available. No information available. No information available. The table below indicates whether each agency has listed any ingredient as a carcinogen.			
Chemical Name	ACGIH	IARC	NTP	OSHA
Butoxyethanol	A3	Group 3		
111-76-2				
•	nference of Governmental	Industrial Hygienists)		
A3 - Animal Carcinogen				
IARC: (International Age	ency for Research on Cano	er)		
Group 3 - Not Classifiable	Group 3 - Not Classifiable as to Carcinogenicity in Humans			
Reproductive toxicity	No information available.			
Developmental Toxicity	No information available.			
STOT - single exposure	No information available.			
STOT - repeated exposu	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 risks of irreversible effects. May cause adverse liver effects.	
Target Organ Effects Aspiration hazard	Blood, Central nervous system, Eyes, Hematopoietic System, Kidney, Liver, Respiratory system, Skin. No information available.	
Aspiration nazaru		

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	7393 mg/kg
ATEmix (dermal)	3852 mg/kg
ATEmix (inhalation-gas)	14143 mg/l
ATEmix (inhalation-dust/mist)	30.3 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other
			aquatic invertebrates
Butoxyethanol		1490: 96 h Lepomis macrochirus	1000: 48 h Daphnia magna mg/L
111-76-2		mg/L LC50 static 2950: 96 h	ÉC50
		Lepomis macrochirus mg/L LC50	
Sodium Hydroxide		45.4: 96 h Oncorhynchus mykiss	
1310-73-2		mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Butoxyethanol	0.81
111-76-2	

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
Contaminated packaging	Do not re-use empty containers.
US EPA Waste Number	D002

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

Chemical Name	California Hazardous Waste Status
Sodium Hydroxide	Toxic
1310-73-2	Corrosive

14. TRANSPORT INFORMATION

DOT UN/ID No Proper shipping name Hazard class Packing Group Reportable Quantity (RQ) Special Provisions Emergency Response Guide Number	UN3266 Corrosive liquid, basic, inorganic, n.o.s. (Contains: Sodium Hydroxide) 8 III Sodium hydroxide: RQ lb.= 1000 IB3, T7, TP1, TP28 154
IMDG – Maritime Transportation UN/ID No Proper shipping name Hazard class Packing Group EmS No. Special Provisions	UN3266 Corrosive liquid, basic, inorganic, n.o.s. (Contains: Sodium Hydroxide) 8 III F-A, S-B Check regulations for limited quantity exceptions
IATA – Air Transportation UN/ID No Proper shipping name Hazard class Packing Group Special Provisions	Do not ship by air unless within allowed limits

15. REGULATORY INFORMATION

International Inventories	
TSCA	
DSL/NDSL	

Complies Complies

Legend: TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

<u>SARA 313</u>

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 %
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	No
Reactive Hazard	No

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):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Hydroxide 1310-73-2	1000 lb			Х

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):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium Hydroxide 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
1310-73-2			NG 454 Kỹ linai NG

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Butoxyethanol 111-76-2	Х	X	Х
Sodium Hydroxide 1310-73-2	Х	X	Х

U.S. EPA Label information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>NFPA</u> HMIS	Health hazard3Health hazard3	Flammability 1 Flammability 1	Instability 0 Physical Hazard 0	Physical and chemical hazards - Personal protection X
Prepared By Revision Date Revision Note	Bridgewater Environmental Health & Safety 13-Sept-2017			

No information available

Disclaimer

The (M)SDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Bridgewater LLC to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

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End of Material Safety Data Sheet