



HYDRO-FORCE™

SAFETY DATA SHEET

Issuing date 08-May-2015

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Version 1

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

Product identifier

Product Label Name Hydro-Force - Viper Venom
Other means of identification
UPC Code(s) Not applicable
Product code CR22
UN/ID No UN3266
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Specialty cleaner. Tile and grout cleaner.
Uses advised against Follow label instructions. Not recommended for any use except intended use.

Supplier's details

Supplier Address	Manufacturer Address
Hydro-Force	Hydro-Force
4282 South 590 West	4282 South 590 West
Salt Lake City, UT 84123	Salt Lake City, UT 84123
USA	USA

Emergency telephone number

Company Phone Number	1-801-268-2673
Company Emergency Phone Number	United States: 1-800-535-5053 (INFOTRAC – 24 hours, 7 days a week)
Emergency telephone	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
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

**Appearance** Clear Liquid**Physical state** liquid**Odor** No information available**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
- General Hazards Keep out of reach of children

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Butoxyethanol	111-76-2	1 - 5	*
Diethylene glycol monobutyl ether	112-34-5	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.
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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.
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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 Products	No information available.
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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 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 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 conditions Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly 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
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm inhalable fraction and vapor		
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	liquid	Odor	Characteristic
Appearance	Clear Liquid	Odor threshold	No information available
Color	No information available		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	12.5		
Melting point	No information available		
Boiling point/boiling range	No information available		
Flash Point	No information available	125	
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limits in Air			
Upper Flammability Limit	No information available		
Lower Flammability Limit	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	1.015		
Water solubility	Soluble in water		
Solubility in other solvents	No information available		
Partition coefficient: n-octanol/water	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Viscosity, kinematic	200 cps		
Viscosity, dynamic	No information available		
Explosive properties	No information available		
Oxidizing Properties	No information available		

Other information

Softening point	No information available
Molecular weight	No information available
VOC Content(%)	No information available
Density VALUE	1.015
Bulk Density VALUE	No information available

10. STABILITY AND REACTIVITY

Reactivity

Chemical stability

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. May cause burns.
Skin contact	Avoid contact with skin. 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
Diethylene glycol monobutyl ether 112-34-5	= 3384 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	
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	No information available.
Eye damage/irritation	No information available.
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
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 to Carcinogenicity in Humans

Reproductive toxicity	No information available.
Developmental 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 risks of irreversible effects. 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

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 111-76-2		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
Diethylene glycol monobutyl ether 112-34-5	100: 96 h Desmodesmus subspicatus mg/L EC50	1300: 96 h Lepomis macrochirus mg/L LC50 static	100: 48 h Daphnia magna mg/L EC50
Sodium Hydroxide 1310-73-2		45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Butoxyethanol 111-76-2	0.81

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 1310-73-2	Toxic Corrosive

14. TRANSPORT INFORMATION

DOT

UN/ID No	UN3266
Proper shipping name	Corrosive liquid, basic, inorganic, n.o.s. (Sodium Hydroxide)
Hazard class	8
Packing Group	III
Reportable Quantity (RQ)	Sodium hydroxide: RQ lb.= 1000
Special Provisions	IB3, T7, TP1, TP28
Emergency Response Guide Number	154

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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 %
Butoxyethanol - 111-76-2	1.0
Diethylene glycol monobutyl ether - 112-34-5	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			X

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

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	X	X	X
Diethylene glycol monobutyl ether 112-34-5	X		X
Sodium Hydroxide 1310-73-2	X	X	X
Sodium Sulfate 7757-82-6		X	X

U.S. EPA Label information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	Health hazard 3	Flammability 1	Instability 0	Physical and chemical hazards -
HMIS	Health hazard 3	Flammability 1	Physical Hazard 0	Personal protection X

Prepared By Hydro-Force
Environmental Health & Safety
Revision Date 08-May-2015
Revision Note

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