

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

Product Name BRUTE FORCE

### Other means of identification

Product Code 1664

### Recommended use of the chemical and restrictions on use

Recommended use Heavy Duty Cleaner Degreaser  
Uses Advised Against For industrial and institutional use only.

### Details of the supplier of the safety data sheet

Company Name Blue Cardinal Chemical, LLC  
3670 Scarlet Oak Blvd  
St. Louis, MO 63122  
800-325-3312

### Emergency telephone number

Emergency Telephone CHEMTEL 1-800-255-3924

## 2. HAZARDS IDENTIFICATION

### Classification

Acute aquatic toxicity	Category 3
Acute toxicity Dermal	Category 5
Acute toxicity Oral	Category 4
Corrosive to metals	Category 1
Serious Eye Damage	Category 1
Skin Corrosion	Category 1B

Safety data sheet prepared in accordance to the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

### Label elements

### Emergency Overview

## DANGER

### Hazard statements

May be harmful in contact with skin. Harmful if swallowed. Causes severe skin burns and eye damage. May be corrosive to metals.  
Harmful to aquatic life





**Appearance:** Opaque colorless

**Physical state:** Liquid

**Odor:** Characteristic

### Precautionary Statements - Prevention

If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Avoid release to the environment. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Keep only in original packaging. Wear protective gloves, protective clothing, eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray.

### Precautionary Statements - Response

Call a POISON CENTER/doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Absorb spillage to prevent material damage. 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. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Specific treatment (see First-Aid on this label).

### Precautionary Statements - Storage

Store in a corrosive resistant container with a resistant inner liner. Store locked up.

### Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/national/international regulations.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO.	WEIGHT - %	TRADE SECRET
SODIUM HYDROXIDE	0001310-73-2	6% - 24%	*
POTASSIUM HYDROXIDE	0001310-58-3	4% - 16%	*
POLY(OXY-1,2-ETHANEDIYL), .ALPHA.- SULFO-.OMEGA.-(DODECYLOXY)-, SODIUM SALT (1:1)	0009004-82-4	1% - 4%	*

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

## 4. FIRST AID MEASURES

### First aid measures

#### Skin Contact

Rinse with lukewarm, gently flowing water for 5 minutes or until product is removed. Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower for a duration of 30 minutes or until medical aid is available. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before re-use or discard.

#### Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 30 minutes or until medical aid is available. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a POISON CENTER or doctor.

<b>Inhalation</b>	Remove source of exposure or move person to fresh air and keep comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor. Immediately call a POISON CENTER or doctor.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

**Most important symptoms and effect, both acute and delayed**

**Symptoms** No data available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

**Unsuitable extinguishing media:** Do not use straight stream of water.

**Specific hazards arising from the chemical**

Runoff may pollute waterways Fire will produce irritating and corrosive gases. Containers may explode in fire.

**Protective equipment and precautions for firefighters**

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Avoid breathing vapor or mist. Do not get on skin, eyes or clothing.
<b>Recommended Equipment</b>	Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA). Wear liquid tight chemical protective clothing in combination with positive pressure self-contained breathing apparatus (SCBA).
<b>Emergency Procedure</b>	Stay uphill and/or upstream. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Evacuate and isolate hazard area and keep unauthorized personnel away.

**Environmental precautions**

**Environmental precautions** Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and material for containment and cleaning up**

**Methods for containment & cleaning up** Absorb Liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal. Ventilate area after clean-up is complete.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### Advice on safe handling

Wash hands after use. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. All containers must be properly labeled. Eyewash stations and showers should be available in areas where this material is used and stored Do not get in eyes, on skin, or on clothing. Do not breathe vapor or mist.

#### Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

### Conditions for safe storage, including any incompatibilities

#### Storage Conditions

Store in a cool, dry, well ventilated area, away from sources of ignition and incompatibilities. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent lea age. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous Store in approved containers and protect against physical damage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Appropriate engineering controls

#### Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids.

#### Skin and body protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

CHEMICAL NAME	CAN_QCVECD mg - CANADA_QUE BÉC VALEUR D'EXPOSITIO N DE COURTE DURÉE_mg	CAN ALsmg	CAN_AL Nota tion	ACGIH STEL (mg/m3)	ACGIH TLV Basis	OSHA TWA (mg/m3)	OSHA Tables (Z1, Z2, Z3)	NIOSH TWA (mg/m3)
POTASSIUM	C2	(c) 2	3: Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.	C 2	URT, eye, & skin irr			2
SODIUM	C2	(c) 2	3: Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.	C 2	URT, eye, & skin irr	2	1	

C) - Ceiling limit, irr - Irritation, URT - Upper respiratory tract

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Opaque colorless liquid
Color	Colorless
Odor	Characteristic
Odor threshold	N/A

Property	Values
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pH	<13
Specific Gravity	0.54320
Viscosity	N/A
Melting point/freezing point	N/A
Flash point	N/A
Boiling point / boiling range	N/A
Evaporation rate	N/A
Flammability (solid, gas)	N/A
Flammability Limits in Air	
Upper flammability limit:	N/A
Lower flammability limit:	N/A
Vapor pressure	N/A
Vapor density	N/A
Water solubility	N/A
Partition coefficient	N/A
Autoignition temperature	N/A
Decomposition temperature	N/A

### Other Information

Density	4.53323 lb/gal
% VOC	0.00000%
Density VOC	0.00000 lb/gal
% HAPS	0.00000%
Density HAPS	0.00000 lb/gal
% VHAPS	0.00000%
Density VHAPS	0.00000 lb/gal
% Solids By Weight	27.74190%

## 10. STABILITY AND REACTIVITY

### Stability

Stable under normal storage and handling conditions.

### Possibility of Hazardous Reactions

Will not occur.

### Conditions to avoid

Avoid heat, sparks, flame, high temperature and contact with incompatible materials.

### Incompatible materials

Strong bases, acids, and oxidizing agents. Corrosive in contact with metals.

### Hazardous Decomposition Products

Oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

#### Respiratory/Skin Sensitization

Based on available data, the classification criteria are not met. 0001310-58-3 POTASSIUM HYDROXIDE. May cause a skin allergy.

#### Serious Eye Damage/Irritation

Causes serious eye damage. 0001310-58-3 POTASSIUM HYDROXIDE. Contact can severely irritate and burn the eyes leading to eye damage. 0001310-73-2 SODIUM HYDROXIDE. Produces severe damage.

#### Skin Corrosion/Irritation

Causes severe skin burns and eye damage. 0001310-58-3 POTASSIUM HYDROXIDE. Contact can severely irritate and burn the skin. 0001310-73-2 SODIUM HYDROXIDE. Severe skin irritant. Causes second-and third-degree burns on short contact

#### Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met. 0001310-73-2 SODIUM HYDROXIDE. Repeated exposure can lead to permanent lung damage. May cause bronchitis to develop with coughing, phlegm, and/or shortness of breath.

#### Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met. 0001310-58-3 POTASSIUM HYDROXIDE. Exposure can cause headache, dizziness, nausea and vomiting. 0001310-73-2 SODIUM HYDROXIDE. Higher exposures may cause pulmonary edema.

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

#### Sensitization

Based on available data, the classification criteria are not met. 0001310-58-3 POTASSIUM HYDROXIDE May cause a skin allergy.

#### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

#### Carcinogenicity

Based on available data, the classification criteria are not met.

#### Reproductive toxicity

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

### Numerical measures of toxicity - Product Information

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

ATE (oral)	1126.63 mg/kg body weight
ATE (dermal)	4554.87 mg/kg body weight
ATE (inhalation-dust/mist)	>5 mg/l0001310-73-2 SODIUM HYDROXIDE

#### Acute Toxicity Estimate (ATE)

May be harmful in contact with skin. Harmful if swallowed. Dust may cause damage to upper respiratory tract and lung itself, producing from mild nose irritation to pneumonitis. Severe damage to mucous membranes

0001310-58-3 POTASSIUM HYDROXIDE

LD50 (oral, rat): 365 mg/kg (7)

LD50 (oral, male rat): 273 mg/kg (8)

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life. 0001310-58-3 POTASSIUM HYDROXIDE. LC50(Fish - Gambusia Affinis , 96 hrs ) : 80 mg/L

**Persistence and degradability**

No data available.

**Bioaccumulation**

0001310-73-2 SODIUM HYDROXIDE. NaOH is not expected to bioconcentrate in organisms.

**Other adverse effects**

No Information available.

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

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

**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.

	U.S. DOT Information	IMDG Information	IATA Information	Canada TDG Information
<b>UN Number</b>	UN3266	UN3266	UN3266	UN3266
<b>Proper shipping name</b>	Corrosive liquid, basic, inorganic, n.o.s.	Corrosive liquid, basic, inorganic, n.o.s.	Corrosive liquid, basic, inorganic, n.o.s.	Corrosive liquid, basic, inorganic, n.o.s.
<b>Hazard Class</b>				8
<b>Hazard Class</b>	8	8	8	
<b>Packaging</b>	II	II	II	II
<b>Hazardous substance (RQ)</b>	No Data Available			No Data Available
<b>Marine Pollutant</b>	No Data Available	No Data Available		No Data Available
<b>Note / Special Provision</b>	No Data Available	No Data Available	No Data Available	No Data Available
<b>Toxic-Inhalation Hazard</b>	No Data Available			No Data Available

**15. REGULATORY INFORMATION**

CAS	Chemical Name	% By Weight	Regulation List
0001310-73-2	SODIUM HYDROXIDE	6% - 24%	DSL,CERCLA,SARA312,TSCA,Cana da_ON_419
0001310-58-3	POTASSIUM HYDROXIDE	4% - 16%	DSL,CERCLA,SARA312,TSCA,Cana da_ON_419,MA_RightToKnow - MASSACHUSETTS RIGHT TO KNOW
0009004-82-4	POLY(OXY-1,2-ETHANEDIYL), .ALPHA.-SULFO-OMEGA.- (DODECYLOXY)-, SODIUM SALT (1:1)	1% - 4%	DSL,SARA312,TSCA

The information in this Section does not list non-hazardous components that might have relevant DSL, TSCA regulatory values, if they are present at less than 100%. Please contact manufacturer for more information.

**Product does not contain any chemicals listed under California Proposition 65**

## 16. OTHER INFORMATION

**Issue Date** 09/09/2022  
**Version** 1

### Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

### 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**