SAFETY DATA SHEET

Date Prepared : 12/11/2014 SDS No : BRU

Brute

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Brute GENERAL USE: Clean and remove lime scale and rust from toilets and urinals. PRODUCT DESCRIPTION: High Acid Bowl Cleaner PRODUCT CODE: BRU CHEMICAL FAMILY: Hydrochloric Acid/detergent blend

MANUFACTURER

MISCO Products Corporation 1048 Stinson Drive Reading, PA 19605 Emergency Phone: 610-926-4106 Customer Service: 800-548-4568 Transportation: 800-548-4568

24 HR. EMERGENCY TELEPHONE NUMBERS CHEM-TEL (Medical and Transportation): 800-255-3924 POISON CONTROL CENTER (Medical): 800-222-1222

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Corrosion, Category 1 Eye Corrosion, Category 1 Acute Toxicity (Oral), Category 4 Target Organ Toxicity (Single exposure), Category 3, Respiratory tract irritation

Physical:

Corrosive to Metals, Category 1

GHS LABEL



mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H314: Causes severe skin burns and eye damage. H302: Harmful if swallowed. H335: May cause respiratory irritation. H290: May be corrosive to metals.

PRECAUTIONARY STATEMENT(S)

Prevention:

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P260: Do not breathe fumes, gas, mist, vapors or spray.

- P270: Do not eat, drink or smoke when using this product.
- P264: Wash hands thoroughly after handling.
- P234: Keep only in original packaging.
- P102: Keep out of reach of children.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P363: Wash contaminated clothing before reuse.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310: Immediately call a POISON CENTER or doctor/physician.

P390: Absorb spillage to prevent material damage.

Storage:

P405: Store locked up.

P403: Store in a well-ventilated place.

P233: Keep container tightly closed.

Disposal:

P501: Dispose of contents/container according to all local, state and Federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: White opaque liquid

IMMEDIATE CONCERNS: Causes irreversible eye damage and skin burns.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive to the eyes and may cause severe damage including blindness.

SKIN: Corrosive, causes skin burning.

SKIN ABSORPTION: Harmful if absorbed through skin.

INGESTION: Harmful if swallowed.

INHALATION: Vapors are irritating to eyes and respiratory tract.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: None known.

CARCINOGENICITY: None known.

MUTAGENICITY: None known.

ROUTES OF ENTRY: Eye, skin, ingestion, Inhalation.

TARGET ORGAN STATEMENT: Respiratory tract.

CANCER STATEMENT: NA = Not Applicable

WARNING CAUTION LABELS: Corrosive

PHYSICAL HAZARDS: May be corrosive to certain metals.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Hydrochloric acid	22 - 24	7647-01-0
Lauramine oxide	0 - 2	1643-20-5
Alcohol ethoxylate	0 - 2	68131-39-5
Water	70 - 75	7732-18-5

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

SKIN: Remove contaminated clothing. Immediately flush with water followed by washing with mild soap. Seek medical attention.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Severe burning sensation, damage marked by burns.

SKIN: Burning sensation, redness, swelling and possible blistering.

SKIN ABSORPTION: Not Established

INGESTION: Irritation of mouth, throat, along with stomach upset, vomiting.

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.

ACUTE TOXICITY: Corrosive to eyes and skin. Harmful if inhaled. Harmful if swallowed

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: None

EXTINGUISHING MEDIA: Not required.

EXPLOSION HAZARDS: None

FIRE FIGHTING PROCEDURES: Use an extinguishing agent suitable for surrounding fire.

HAZARDOUS DECOMPOSITION PRODUCTS: None Expected.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.

LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid discharges into open waterways.

LAND SPILL: Avoid discharge to soil.

AIR SPILL: NA = Not Applicable

GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.

RELEASE NOTES: Product is harmful to aquatic life.

SPECIAL PROTECTIVE EQUIPMENT: Eye protection, rubber gloves, rubber boots to protect feet.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Close container after use.

HANDLING: Wear chemical resistant rubber or neoprene gloves and eye safety goggles/full face shield when handling.

STORAGE: Store only in original container. Do not reuse empty container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store product away from food and water sources. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

STORAGE TEMPERATURE: Store at ambient temperatures.

STORAGE PRESSURE: Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS OSHA PEL ACGIH TLV Supplier OEL					
					er OEL		
Chemical Name		ppm	mg/m ³	ppm	mg/m³	ppm	mg/m ³
Hydrochloric acid	TWA	5 ppm		2 ppm		NL	NL
	STEL					NL	NL

ENGINEERING CONTROLS: Use in well ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash googles and full face-shield.

SKIN: Rubber or other chemical resistant gloves.

RESPIRATORY: A respirator is not needed under normal and intended conditions of product use.

PROTECTIVE CLOTHING: NA = Not Applicable

WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid **ODOR:** Pungent **ODOR THRESHOLD:** Not Established **COLOR:** White emulsion **pH:** < 1.0 **PERCENT VOLATILE:** >90 FLASH POINT AND METHOD: None FLAMMABLE LIMITS: N/A AUTOIGNITION TEMPERATURE: NA = Not Applicable VAPOR PRESSURE: ~ 140 mm Hg at (68°F) VAPOR DENSITY: > 1 Air = 1 BOILING POINT: 212° F; 100° C FREEZING POINT: 32° F; 0° C THERMAL DECOMPOSITION: Not Available **SOLUBILITY IN WATER:** Complete EVAPORATION RATE: (Water = 1) 1.0 **DENSITY:** 9.13 at 20°C (68°F) SPECIFIC GRAVITY: 1.175 grams/ml. at 20°C (68°F) VISCOSITY: Water thin. (VOC): None

10. STABILITY AND REACTIVITY

REACTIVITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur.
STABILITY: Stable under normal storage and use conditions.
CONDITIONS TO AVOID: Do not mix with other chemicals.
POSSIBILITY OF HAZARDOUS REACTIONS: Reacts violently with strong alkaline materials.
HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products

INCOMPATIBLE MATERIALS: Strong alkalis, reducing agents, chlorine bleach products;metals e.g. aluminum, brass, copper, iron.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	INHALATION LC ₅₀ (rat)
Hydrochloric acid	900 mg/kg (rat)	2134 mg/l (Rat), Aerosol

EYES: Not Established

DERMAL LD₅₀: Not Established

ORAL LD₅₀: Not Established

EYE EFFECTS: Corrosive to eyes. Permanent damage may occur.

SKIN EFFECTS: Corrosive to skin.

CARCINOGENICITY

IARC: No products were found.

CORROSIVITY: Corrosive

GENETIC EFFECTS: No known significant effects or critical hazards.

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.

TARGET ORGANS: Vapors may harm respiratory tract.

TERATOGENIC EFFECTS: No known significant effects or critical hazards.

MUTAGENICITY: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Toxic to aquatic life.

ECOTOXICOLOGICAL INFORMATION: This material may be toxic to aquatic life.

BIOACCUMULATION/ACCUMULATION: Not Established

AQUATIC TOXICITY (ACUTE)

96-HOUR LC₅₀: 282 mg/l, Mosquito fish (Gambusia affinis)

CHEMICAL FATE INFORMATION: Not Established

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. If discarded, this material and its containers should be treated as hazardous waste based on the characteristics of corrosivity as defined under federal RCRA regulations (40 CFR 261). Consult local authorities for disposal into public sewer.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: Any method in accordance with local, state, and federal laws. Best method is to recycle or reuse for intended purpose.

EMPTY CONTAINER: Rinse container with clear water. Offer container for recycling, or dispose of in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Compound, Cleaning Liquid

TECHNICAL NAME: Hydrochloric Acid Solution

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: 1760

PACKING GROUP: III

PLACARDS: Corrosive

LABEL: Certain package sizes determine the proper labeling of containers. Consult manufacturer for specific information regarding proper labeling.

OTHER SHIPPING INFORMATION: Certain shipping modes and packaging sizes may have exceptions from the transport regulations. The classifications/information provided above may not reflect applicable exceptions. Contact the manufacturer for more specific information on the proper shipping of this material.

U.S. CUSTOMS HARMONIZATION NUMBER: 3808.94.0000

SPECIAL SHIPPING NOTES: Quantities less than or equal to one (1) gallon = Limited Quantity not regulated.

AIR (ICAO/IATA)

SHIPPING NAME: Contact manufacturer for more information.

VESSEL (IMO/IMDG)

SHIPPING NAME: Contact manufacturer for more information.

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Limited Quantity Ground

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health - Acute

FIRE: No PRESSURE GENERATING: No REACTIVITY: Yes ACUTE: Yes CHRONIC: No

313 REPORTABLE INGREDIENTS: No listed substance

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No listed substance

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Hydrochloric acid	22 - 24	5,000

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

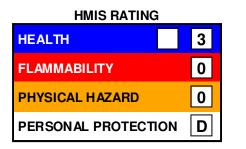
Chemical Name	Requirements		
Hydrochloric acid	Massachusetts Right to Know Substance New Jersey Right To Know Substance New York Right to Know Substance Pennsylvania Right to Know Substance Rhode Island Right to Know Substance		

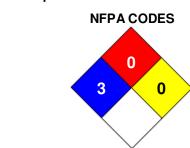
CALIFORNIA PROPOSITION 65: No listed substance

CARCINOGEN: No listed substance

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department **Date Prepared:** 12/11/2014





MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.

BRU		AFETY DATA SHEE		N/A=Not Applicable Date: 1/09 Revision: n/a
Prepared by: Regulatory Affairs Dept.	· •	ing to 29 CFR 1910.1200)		Date. 1/09 Revision. II/a
Section 1-F	PRODUCT IDENTIFICAT	ION AND SUPPLIEK I	Distributor's Name:	
Misco Products Corporation Supplier's Address: 1048 Stinson Drive Reading, PA 19605 Supplier's Phone #: (610) 926-4106	Generic Name: High Acid I Chemical Family: Hydroch Formula: Proprietary		Distributor's Addre	ss:
	SECTION 2-INGREDI	ENT INFORMATION		
CHEMICAL NAME	CAS NO.	WT. % PEI	L TWA	A-TLV STEL-TLV
Water Hydrochloric Acid Nonionic Surfactant Benzalkonium Chloride	7732-18-5 7647-01-0 9016-45-9 68424-85-1	to 100 24 min 5 pr 0 to 5 0 to 5	om 5 ppr	n N/A
SECTION 3-PHYSICAL	DATA	SECTION	-FIRE AND EXPL	OSION HAZARD DATA
	Fravity: 1.175	Flash Point (Metho		LOSION HAZARD DATA
% Volatile: 90+ pH: 0.5-1	ion Rate (Water=1): <1	1 Upper Explosion Limit: N/A Lower Explosion Limit: N/A Extinguishing Media: N/A		
	SECTION 5-REA	CTIVITY DATA		
Stability: Stable Hazards Decomposition Products: Hydrogen gas formed vapors emitted when heated. Chlorine gas may form by ele	l on contact with metals. HCL	Hazardous Polymerizatio Incompatibility (Material	s to Avoid): Corrosive , amines and carbonates	e to many materials. Strong alkalis or s. Contact with metals, metal oxides,
SEC	CTION 6-STORAGE AND			
DANGER! POISON. ACID Corrosive. Causes chemical b breathing of vapors. Wear rubber gloves and protective ey oxidizers or other cleaning products. Keep container close Avoid contact with aluminum, brass, iron and strong alkal	ewear when handling. Keep out o d during storage. For institutiona	of reach of children. For use	by trained personnel or	ly. Do not mix with alkali cleaners,
SECTION 7-HEALTH HAZARDS A Effects of Overexposure:	ND FIRST AID			TION INFORMATION as air purifying canister when used in
 Skin: Severe skin irritant. Prolonged or repeated contact v burns. Eyes: Severe eye irritant. Liquid and mists will burn or inj corneal damage. Inhalation: Strong irritant to mucous membranes of the n may cause choking, burning sensation of throat and lungs, damage. May be fatal. Chronic exposure may damage teet Ingestion: POISON Irritating and corrosive to the mouth contact. May be fatal. Cause severe ulceration of mucous networks. 	ure eyes, causing permanent ose, throat, and lungs. Vapors leading to irreversible h. and throat on immediate	ingredient (Hydrochloric A Protective Gloves: Full ar Eye Protection: Chemical Other Protective Equipm	.cid) below acceptable l m length acid proof, rub splash goggles or full-f ent: Eyewash station sh	ober, or neoprene.
First Aid Procedures:			ON 9-SPILL OR LEA	
 Skin: Immediately remove contaminated clothing. Flush e quantities of water followed by washing with mild soap. S immediately. Eyes: Immediately flush with large quantities of water for eyelids open. Seek medical attention immediately. Inhalation: Get to fresh air. Seek medical attention immediately attention. Do not induce vomiting. Drink large quantities attention immediately. 	 nild soap. Seek medical attention inid soap. Seek			
	SECTION 10-REGULA			
No - Sudden Release of Pressure Hazard(hydrochloric aciNo - Reactivity HazardFOR 1 GALLONYes - Immediate (acute) Health Hazard(hydrochloric aci		ERS > 1 Gallon: Compounds, d), 8, NA-1760, PG II CONTAINERS: Compound d), 8, NA-1760, PG II	HMIS Hazardous Materials Identification System Health Flammability Reactivity Boxeanel Protection	
No - Delayed (chronic) Health Hazard FOR EMERGENCY MEDICAL OR TRANSPORT INF	ORMATION: CHEM-TEL, Inc		urs, 7 days per week)	Personal Protection
This product contains the following toxic chemical(s) subject of 40 CFR 372.		t section 313 of the Emergen		
CAS# Exempt This product contains the following chemical(s) which have CAS#	Chemical Name None been established to be either a ca Chemical Name	arcinogen or suspected carcir	Percent by Wei logen. Percent by Wei	
<u> </u>	None		· · · · · · · · · · · · · · · · · · ·	<u>_</u>
	SECTION 11-OTHE		9.99. 0	1. 1 1
This company cannot anticipate all conditions of handling information, or the safety and suitability of our products e health and safety information contained herein as a guide.	either alone or in combination wi	th other products. It is the re	sponsibility of the user	to provide a safe workplace, using the