

# Material Safety Data Sheet: BANISH

Supersedes Date 05/03/2011

Issuing Date 01/08/2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** BANISH  
**Recommended use** Cleaning agent  
**Information on Manufacturer**  
CHEMSEARCH DIV. OF NCH CORP.  
BOX 152170  
IRVING, TX 75015

**Product Code** 0028  
**Chemical nature** Aqueous solution Acidic  
**Emergency Telephone Number**  
CHEMTREC® 800-424-9300

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

DANGER  
POISON  
Corrosive  
Causes skin and eye burns  
May cause delayed lung injury and burns  
Harmful or fatal if swallowed

**Color** Colorless - Amber

**Physical State** Liquid

**Odor** Pungent

**Potential Health Effects**

**Principle Route of Exposure**

**Primary Routes of Entry**

**Acute Effects**

**Eyes**

**Skin**

**Inhalation**

**Ingestion**

Skin contact, Eye contact, Inhalation.  
Inhalation

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

Causes skin burns.

Harmful by inhalation. Causes burns.

If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Inhaled corrosive substances can lead to a toxic edema of the lungs.

Respiratory system, Eyes, Skin, Teeth.

Respiratory disorders, Skin disorders.

**Chronic Toxicity**

**Target Organ Effects**

**Aggravated Medical Conditions**

**Potential Environmental Effects**

See Section 12 for additional Ecological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Hydrochloric acid	7647-01-0

## 4. FIRST AID MEASURES

**General advice**

**Eye Contact**

**Skin Contact**

**Inhalation**

**Ingestion**

**Notes to physician**

Do not get in eyes, on skin or on clothing. Do not breathe mist.

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.

Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

Move to fresh air. In case of shortness of breath, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed.

## 5. FIRE-FIGHTING MEASURES

**Flash Point** Does not flash

**Method**

Not applicable

**Autoignition Temperature** No information available.

**Flammability Limits in Air %** Hydrogen, by reaction with metals.

**Upper 75**

**Lower 4**

**Suitable Extinguishing Media**

Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards arising from the chemical**

Material can create slippery conditions. Contact with metals liberates flammable hydrogen gas.

**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.

**NFPA****Health 3****Flammability 1****Instability 0****HMIS****Health 3****Flammability 1****Instability 0****6. ACCIDENTAL RELEASE MEASURES****Personal Precautions**

Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

**Environmental Precautions**

Do not flush into surface water or sanitary sewer system.

**Methods for Containment**

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13)

**Methods for Cleaning Up**

Pick up and transfer to properly labeled containers

**Neutralizing Agent**

Neutralize with lime milk or soda and flush with plenty of water.

**7. HANDLING AND STORAGE****Handling**

Do not get in eyes, on skin or on clothing. Do not breathe mist.

**Storage**

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Storage Temperature**

**Minimum** 35 °F / 2 °C

**Maximum** 120 °F / 49 °C

**Storage Conditions**

**Indoor** X

**Outdoor**

**Heated**

**Refrigerated**

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH
Hydrochloric acid	Ceiling: 2 ppm	Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

**Personal Protective Equipment****Eye/Face Protection**

Tightly fitting safety goggles. Face-shield.

**Skin Protection**

Wear suitable protective clothing. Impervious gloves.

**Respiratory Protection**

In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**General Hygiene Considerations**

Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Physical State**

Liquid

**Color**

Colorless - Amber

**Appearance**

Transparent - Hazy

**Specific Gravity**

1.09

**Percent Volatile (Volume)**

99.6

**VOC Content (g/L)**

0

**Vapor Density**

0.7 (Air = 1.0)

**Boiling Point/Range**

220 °F / 104 °C

**Viscosity**

Non viscous

**Odor**

Pungent

**pH**

< 1

**Evaporation Rate**

0.6 (Butyl acetate=1)

**VOC Content (%)**

0

**Vapor Pressure**

15.4 mmHg @ 70°F

**Solubility**

Completely soluble

**10. STABILITY AND REACTIVITY****Chemical Stability**

Stable. Hazardous polymerization does not occur.

**Conditions to Avoid**

None known

**Incompatible Products**

Bases, Strong oxidizing agents, Reducing agents, Metals.

**Hazardous Decomposition Products**

Hydrogen chloride gas, Chlorine gas, Hydrogen, by reaction with metals.

**Possibility of Hazardous Reactions**

None under normal processing

**11. TOXICOLOGICAL INFORMATION****Product Information**

No information available.

**Component Information**

**Acute Toxicity**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Hydrochloric acid	= 700 mg/kg ( Rat )	> 5010 mg/kg ( Rabbit )	= 3124 ppm ( Rat ) 1 h	no data available	no data available

**Chronic Toxicity**

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Hydrochloric acid	no data available	no data available	no data available	no data available	eyes, respiratory system, skin, teeth

**Carcinogenicity**

There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Hydrochloric acid	not applicable	not applicable	not applicable	not applicable	not applicable

**12. ECOLOGICAL INFORMATION**

Product Information

No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Hydrochloric acid	no data available	LC50 = 282 mg/L Gambusia affinis 96 h	no data available	no data available	N/A

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

**13. DISPOSAL CONSIDERATIONS****Product Disposal**

Dispose of in accordance with local regulations.

**Container Disposal**

Empty containers should be taken for local recycling, recovery, or waste disposal.

**14. TRANSPORT INFORMATION****DOT**

**Proper Shipping Name** Hydrochloric acid solution  
**Hazard Class** 8  
**UN-No** UN1789  
**Packing Group** II  
**Reportable Quantity (RQ)** Hydrochloric acid, RQ kg= 11816.76  
**Description** UN1789, Hydrochloric acid solution, 8, PG II

**TDG**

**Proper shipping name** Hydrochloric acid solution  
**Hazard Class** 8  
**UN-No** UN1789  
**Packing Group** II  
**Description** Hydrochloric acid solution, 8, UN1789, PG II

**ICAO**

**UN-No** UN1789  
**Proper Shipping Name** Hydrochloric acid solution  
**Hazard Class** 8  
**Packing Group** II  
**Shipping Description** UN1789, Hydrochloric acid solution, 8, PG II

**IATA**

**UN-No** UN1789  
**Proper Shipping Name** Hydrochloric acid solution  
**Hazard Class** 8  
**Packing Group** II  
**ERG Code** 8L  
**Shipping Description** UN1789, Hydrochloric acid solution, 8, PG II

**IMDG/IMO**

**Proper Shipping Name** Hydrochloric acid solution  
**Hazard Class** 8  
**UN-No** UN1789  
**Packing Group** II

EmS No. F-A, S-B  
Shipping Description UN1789, Hydrochloric acid solution,8,PG II

**15. REGULATORY INFORMATION****Inventories**

TSCA Complies  
DSL Complies

**U.S. 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

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Hydrochloric acid	7647-01-0	10-30	1.0

**SARA 311/312 Hazardous Categorization**

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	No	No	No	No

**CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs
Hydrochloric acid	5000 lb	500 lb TPQ (gas only) 5000 lb

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

E Corrosive material D1B Toxic materials

**16. OTHER INFORMATION**

Prepared By Angela Hutson  
Supercedes Date 05/03/2011  
Issuing Date 01/08/2014  
Reason for Revision No information available.  
Glossary No information available.  
List of References. No information available.

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