

# Safety Data Sheet

MURIATIC ACID 20 Degree (32%)

SDS Revision Date:

12/12/2022



## 1. Identification

### 1.1. Product identifier

**Product Identity**

MURIATIC ACID 20 DEGREE (32%)

**Alternate Names**

56-108, Blended Formula, Muriatic Acid 20 Degree 32% Concrete, Metal & Tile Cleaner- 1 gallon

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use**

It's designed to clean concrete, metal, and tile.

**Application Method**

Read all precautions and instructions carefully before and after use.

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

**Company Name**

ComStar International Inc.  
20-47 128th Street,  
College Point, NY 11356

**Telephone No.**

718-445-7900  
800-328-0142  
Fax: 718-353-5998

**Emergency 24 HR response No:** 1-800-424-9300 & 703-527-3887 CHEMTREC

Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure, or accident. Please direct all other inquiries to our customer service phone number.

## 2. Hazard(s) identification

### 2.1. Classification of the substance or mixture

Metal Corro 1, H290

Corrosive to metals

Skin Corr 1B; H314

Causes severe skin burns and eye damage.

Eye Dam. 1; H318

Causes serious eye damage.

Specific target organ

toxicity-single exposure 3;

H335

Specific target organ toxicity-single exposure-Respiratory system.

### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



**Warning**

H290 May be corrosive to metals

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H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H335 May cause respiratory irritation

**[Prevention]:**

P234 Keep only in original container

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / eye protection / face protection.

**[Response]:**

P301+330+331 If swallowed: Rinse mouth. Do not induce vomiting.

P303+361 +353 If on skin (or hair): Remove I Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351 +338+310 If in eyes: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

**[Storage]:**

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P406 Store in corrosive resistant container with a resistant inner liner.

**[Disposal]:**

P501 Dispose of contents / container in accordance with local / national regulations.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. Composition/information on ingredients

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
HYDROCHLORIC ACID CAS #: 7647-01-0	32	Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335	

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

\*The full texts of the phrases are shown in Section 16.

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## 4. First aid measures

### 4.1. Description of first aid measures

<b>General</b>	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
<b>Inhalation</b>	After inhalation: fresh air. Call in physician.
<b>Eyes</b>	After eye contact: rinse out with plenty of water. Immediately call-in ophthalmologist. Remove contact lenses.
<b>Skin</b>	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
<b>Ingestion</b>	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralize.

### 4.2. Most important symptoms and effects, both acute and delayed

<b>Overview</b>	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
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<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	No data available
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## 5. Fire-fighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### 5.2. Special hazards arising from the substance or mixture

Hydrogen chloride gas

Hydrogen chloride gas

Not combustible.

Ambient fire may liberate hazardous vapours.

### 5.3. Advice for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4. Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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ERG Guide No. ---137

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment, and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### 6.2. Environmental precautions

Do not let product enter drains.

### 6.3. Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralising material (e.g. Chemisorb® H<sup>+</sup>, Merck Art. No. 101595). Dispose of properly. Clean up affected area.

### 6.4. Reference to other sections

For disposal see section 13.

## 7. Handling and storage

### 7.1. Precautions for safe handling

For precautions see section 2.2.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage conditions

No metal containers.

Tightly closed.

Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials

### 7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. Exposure controls and personal protection

### 8.1 Control parameters

#### Ingredients with workplace control parameters

Component	CAS-No	Value	Control parameters	Basis
Hydrochloric Acid	7647-01-0	C	2 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Not classifiable as a human carcinogen		

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		C	5 ppm 7 mg/m3	USA. NIOSH Recommended Exposure Limits
		C	5 ppm 7 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		C	5 ppm 7 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		PEL	0.3 ppm 0.45 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		C	2 ppm	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

## 8.2. Exposure controls

### Respiratory

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

### Eyes/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

### Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)). Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Splash contact

Material: Latex gloves

Minimum layer thickness: 0.6 mm Break through time: 120 min

Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M)

### Body Protection

Acid-resistant protective clothing required when vapours/aerosols are generated.

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**Control of environmental exposure** Do not let product enter drains.

See section 2 for further details. - [Prevention]:

## 9. Physical and chemical properties

<b>Appearance</b>	Liquid
<b>Color</b>	Light yellow
<b>Odor</b>	Sharp, Pungent
<b>Odor threshold</b>	Not Measured
<b>pH</b>	< 1 at 20 °C (68 °F)
<b>Melting point / freezing point</b>	-30° C (-22° F)
<b>Initial boiling point and boiling range</b>	>100° C (>212° F)
<b>Flash Point</b>	Not applicable
<b>Evaporation rate (Ether = 1)</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Upper/lower flammability or explosive limits</b>	
<b>Vapor pressure (Pa)</b>	227 hPa at 21.1 °C (70.0 °F) 547 hPa at 37.7 °C(99.9 °F)
<b>Vapor Density</b>	No data available
<b>Relative Density</b>	No data available
<b>Specific Gravity</b>	No data available
<b>Solubility in Water</b>	Soluble
<b>Partition coefficient n-octanol/water (Log Kow)</b>	No data available
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	No data available
<b>Viscosity (cSt)</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	
<b>9.2. Other safety information</b>	
No data available	

## 10. Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

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The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

No information available

### 10.5. Incompatible materials

Bases, Amines, Alkali metals, Metals, permanganates, for example potassium permanganate, Fluorine, metal acetylides, hexalithium disilicide Metals

### 10.6. Hazardous decomposition products

## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Mixture

#### Acute toxicity

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages: damage of respiratory tract

Dermal: No data available

#### Skin corrosion/irritation

Mixture causes burns.

#### Serious eye damage/eye irritation

Mixture causes serious eye damage. Risk of blindness!

#### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### Reproductive toxicity

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No data available

### **Specific target organ toxicity - single exposure**

Mixture may cause respiratory irritation.

### **Specific target organ toxicity - repeated exposure**

No data available

### **Aspiration hazard**

No data available

## **11.2 Additional Information**

RTECS: MW4025000

Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

## **Components**

### **Hydrochloric Acid**

#### **Acute toxicity**

Oral: No data available

Inhalation: Cough Difficulty in breathing

Inhalation: absorption

Inhalation: Corrosive to respiratory system.

Symptoms: mucosal irritations, Cough, Shortness of breath, Inhalation may lead to the formation of oedemas in the respiratory tract., Possible damages: damage of respiratory tract, tissue damage

Dermal: No data available

### **Skin corrosion/irritation**

Skin - reconstructed human epidermis (RhE)

Result: Corrosive

(OECD Test Guideline 431)

### **Serious eye damage/eye irritation**

Eyes - Bovine cornea

Result: Corrosive

(OECD Test Guideline 437)

### **Respiratory or skin sensitization**

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

### **Germ cell mutagenicity**

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster ovary cells

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Result: Conflicting results have been seen in different studies.

## **Carcinogenicity**

Carcinogenicity - Did not show carcinogenic effects in animal experiments. (IUCLID)

## **Reproductive toxicity**

No data available

## **Specific target organ toxicity - single exposure**

May cause respiratory irritation.

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Inhalation may lead to the formation of oedemas in the respiratory tract., Possible damages: damage of respiratory tract, tissue damage.

## **Specific target organ toxicity - repeated exposure**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

## **Aspiration hazard**

No aspiration toxicity classification

## **12. Ecological information**

### **12.1. Toxicity**

Mixture

No data available

### **12.2. Persistence and degradability**

No data available

### **12.3. Bioaccumulative potential**

No data available

### **12.4. Mobility in soil**

No data available.

### **12.5. Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### **12.6. Other adverse effects**

No data available.

## **Components**

### **Hydrochloric Acid**

No data available

Toxicity to fish

LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h Remarks: (IUCLID)

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## 13. Disposal considerations

### 13.1. Waste treatment methods

#### Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

## 14. Transport information

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>14.1. UN number</b>	UN 1789	UN 1789	UN 1789
<b>14.2. UN proper shipping name</b>	Hydrochloric acid, limited quantity (each not exceeding 1 L capacity).	Hydrochloric acid, limited quantity (each not exceeding 1 L capacity).	Hydrochloric acid, limited quantity (each not exceeding 1 L capacity).
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class: 8</b>	<b>IMDG: 8</b> <b>Sub Class: Not Applicable</b>	<b>Air Class: 8</b>
<b>14.4. Packing group</b>	II	II	II
<b>14.5. Environmental hazards</b>			
<b>IMDG</b>	Marine Pollutant: No		
<b>14.6. Special precautions for user</b>			
	No further information		

## 15. Regulatory information

### SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

### SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:  
Hydrochloric Acid CAS-No. 7647-01-0

### SARA 311/312 Hazards

Acute Health Hazard

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## Massachusetts Right to Know Components

Hydrochloric Acid CAS-No. 7647-01-0

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right to Know Components

water CAS-No. 7732-18-5

Hydrochloric Acid 7647-01-0 2013-02-08

## New Jersey Right to Know Components

water CAS-No. 7732-18-5

Hydrochloric Acid 7647-01-0 2013-02-08

## 16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The opinions expressed are those of qualified experts within ComStar International Inc. We believe that the information contained is current as of the date of the Safety Data Sheet. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of ComStar International Inc., it is the user's obligation to determine the conditions of safe use of the product.

End of Document