

## Safety Data Sheet

### Startex Muriatic Acid

Version 2.1

Revision Date: 05/19/2017

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** : Startex Muriatic Acid

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

Recommended use : Acid  
Industrial chemical

#### Manufacturer or supplier's details

Company : Nexo Solutions LLC - STARTEX™  
Address : 3 Waterway Square Place Suite 1000  
The Woodlands, TX. 77380  
United States of America

#### Emergency telephone number:

Health North America: 1-855-NEXEO4U (1-855-639-3648)

Health International: 1-855-NEXEO4U (1-855-639-3648)

Transport North America: CHEMTREC (1-800-424-9300)

**Additional Information:** : Responsible Party: Product Safety Group  
E-Mail: [msds@nxeosolutions.com](mailto:msds@nxeosolutions.com)  
SDS Requests: 1-855-429-2661  
SDS Requests Fax: 1-281-500-2370  
Website: [www.nxeosolutions.com](http://www.nxeosolutions.com)

#### SECTION 2. HAZARDS IDENTIFICATION

##### GHS Classification

Corrosive to metals : Category 1

Skin corrosion : Sub-category 1B

Specific target organ toxicity  
- single exposure : Category 3 (Respiratory system)

##### GHS Label element

Hazard pictograms :  

Signal word : Danger

Hazard statements : H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.

Precautionary statements : **Prevention:**  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.



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### Response:

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

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 + P310 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/ physician.

### Storage:

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

P405 Store locked up.

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

### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Hazardous components

CAS-No.	Chemical Name	Weight %
7647-01-0	Hydrochloric acid	20 - 36.99

Any Concentration shown as a range is due to batch variation.

Synonyms : Muriatic acid,

## SECTION 4. FIRST AID MEASURES

General advice : Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.



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In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Continue rinsing eyes during transport to hospital.  
If eye irritation persists, consult a specialist.

- If swallowed : Take victim immediately to hospital.  
Clean mouth with water and drink afterwards plenty of water.  
Do NOT induce vomiting.  
Never give anything by mouth to an unconscious person.

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical  
Carbon dioxide (CO<sub>2</sub>)  
Water spray
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : No hazardous combustion products are known
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Neutralize with chalk, alkali solution or ammonia.  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

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**SECTION 7. HANDLING AND STORAGE**

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Avoid formation of aerosol.  
Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Container may be opened only under exhaust ventilation hood.  
To avoid spills during handling keep bottle on a metal tray.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Do not store near acids.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
7647-01-0	Hydrochloric acid	C	2 ppm	ACGIH
		C	5 ppm 7 mg/m <sup>3</sup>	NIOSH REL
		C	5 ppm 7 mg/m <sup>3</sup>	OSHA Z-1
		C	5 ppm 7 mg/m <sup>3</sup>	OSHA P0

**Personal protective equipment**

- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- Hand protection
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.



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Eye protection	: Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear, colourless, white, yellow
Odour	: characteristic, strong, pungent
Odour Threshold	: 0.25 - 10 ppm
pH	: 1 @ 20 °C (68 °F)
Freezing Point (Melting point/range)	: -46 °C (-51 °F)
Boiling Point (Boiling point/boiling range)	: 100 °C (212 °F)
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 0.3340 PSI @ 20 °C (68 °F)
Relative vapour density	: 1.267
Relative density	: 1.142Reference substance: (water = 1)
Density	: Estimated 9.51 lb/gal
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: No data available



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Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
VOC	: 0.0 % / 0.00 g/l / 0.00 lb/gal
Non VOC	: 100.0 % / 1,053.27 g/l / 8.7 lb/gal
Hazardous Air Pollutants (HAPS)	: 30.0 % / 0.00 g/l / 0.00 lb/gal

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Product will not undergo hazardous polymerization. Stable under recommended storage conditions.
Conditions to avoid	: Avoid contact with: Heat, flames and sparks.  Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: No data available
Hazardous decomposition products	: acid vapors hydrogen chloride Phosgene

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## SECTION 11. TOXICOLOGICAL INFORMATION

### **Skin corrosion/irritation**

#### **Product:**

Remarks: Extremely corrosive and destructive to tissue.

#### **Components:**

##### **7647-01-0:**

Species: Rabbit

Result: Causes burns.



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#### Serious eye damage/eye irritation

##### Product:

Remarks: May cause irreversible eye damage.

#### Carcinogenicity

##### IARC

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

##### OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

##### NTP

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

##### ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

#### STOT - single exposure

##### Components:

##### 7647-01-0:

Target Organs: Respiratory system, Lungs

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

#### Aspiration toxicity

##### Product:

No aspiration toxicity classification

#### Further information

##### Product:

Remarks: No data available

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## SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

No data available

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available



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### Mobility in soil

No data available

### Other adverse effects

#### Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances  
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.  
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact NEXEO's Environmental Services Group at 800-637-7922.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

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## SECTION 14. TRANSPORT INFORMATION

**DOT (Department of Transportation):**  
UN1789, Hydrochloric acid, 8, II

**IATA (International Air Transport Association):**  
UN1789, Hydrochloric acid, 8, II

**IMDG (International Maritime Dangerous Goods):**  
UN1789, HYDROCHLORIC ACID, 8, II

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## SECTION 15. REGULATORY INFORMATION

#### EPCRA - Emergency Planning and Community Right-to-Know Act

#### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ



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		(lbs)	(lbs)
Hydrochloric acid	7647-01-0	5000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Immediate (Acute) Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

7647-01-0 Hydrochloric acid

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMi Intermediate or Final VOC's (40 CFR 60.489).

### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

7647-01-0 Hydrochloric acid

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

7647-01-0 Hydrochloric acid

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

### US State Regulations

#### Massachusetts Right To Know

7647-01-0	Hydrochloric acid	20 - 36.99 %
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#### Pennsylvania Right To Know

7732-18-5	Water	63.01 - 80 %
7647-01-0	Hydrochloric acid	20 - 36.99 %

#### New Jersey Right To Know

7732-18-5	Water	63.01 - 80 %
7647-01-0	Hydrochloric acid	20 - 36.99 %

#### California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:**

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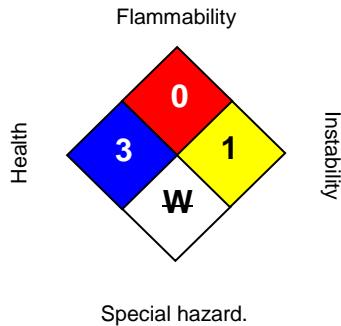
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#### SECTION16. OTHER INFORMATION

##### NFPA:



##### HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	1

0 = not significant, 1 =Slight,  
2 = Moderate, 3 = High  
4 =Extreme, \* = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by NEXEO™ Solutions EHS Product Safety Department (1-855-429-2661) [MSDS@nexeosolutions.com](mailto:MSDS@nexeosolutions.com).

**Revision Date** : 05/19/2017

**Material number:**  
16068080, 16058099, 16058098, 16058097

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic



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GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50			Lethal Concentration 50%