NEW MSDS DATE: 10/03/2002
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MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.
THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)
IMPORTANT: Read this MSDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT IDENTITY: STARTEX MURIATIC ACID
COMPANY IDENTITY: CSD/STARTEX
COMPANY ADDRESS: P O BOX 3087
COMPANY CITY: CONROE, TX 77305
COMPANY PHONE: 1-936-756-1065
CHEMTREC PHONE: 1-800-424-9300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS: 65-70% WATER (7732-18-5),
30-35% HYDROCHLORIC ACID (7647-01-0)[231-595-7]
Number in parentheses is CAS #, number in brackets is European EC #.

SECTION 3. HAZARDS IDENTIFICATION

RISK STATEMENTS
R34: Causes burns.
R37: Irritating to the respiratory system.

SAFETY STATEMENTS:
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45: In case of accident, or if you feel unwell, seek medical advice immediately. (Show the label where possible).

SECTION 4. FIRST AID MEASURES

EYE CONTACT:
For eyes, immediately flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT:
In case of contact with skin immediately remove contaminated clothing.
Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

INHALATION:
After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped give artificial respiration.

SWALLOWING:
ANTIDOTE:
If swallowed, Do NOT induce vomiting. Have patient lie down & keep warm.
Vomiting may lead to severe damage to esophagus which may be fatal.
Give large amounts of water. Give at least one ounce ofmilk of magnesia or aluminum hydroxide gel in an equal amount of water.
if unavailable, give the white of 2 or 3 eggs.
Never give anything by mouth to an unconscious person.CALL A PHYSICIAN.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
NFPA Class B extinguishers(Carbon Dioxide or foam)for Class liquid fires.

SPECIAL FIRE FIGHTING PROCEDURES
Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.
Do not enter confined fire-space without full bunker gear.
(Helmet with face shield,bunker coats, gloves & rubber boots).
Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES
Noncombustible.
Reacts with most metals producing hydrogen which is extremely flammable & may explode.
Applying to hot surfaces requires special precautions. Closed containers may rupture if exposed to extreme heat.

SECTION 6. ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES
Stop spill at source. Dike area & contain.

CLEAN-UP PROCEDURES:
Neutralize with soda ash & dilute with plenty of water. Pump spilled liquid & put contaminated soilin DOT approved containers for disposal. Label immediately. Clean up remainder with absorbent materials. Wet down with plenty of water & remove immediately

SECTION 7. HANDLING AND STORAGE

HANDLING

Use only with adequate ventilation. Avoid breathing of vapor or spray mist.
Do not get in eyes, on skin or clothing.
Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

STORAGE

Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage.
Reacts with most metals producing hydrogen which is extremely flammable & may explode. Wear full face shield, gloves & full protective clothing when opening or handling. When empty, drain completely, replace bungs securely.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

EXPOSURE CONTROLS

Use vapor, mist gas mask within use limits, or ventilate to keep vapors of this material below 3 ppm.
If over TLV, in accordance with 29 CFR 1910.134, use NIOSH approved positive-pressure self-contained breathing apparatus.
Consult Safety Equipment Supplier. Use explosion-proof equipment.

VENTILATION

LOCAL EXHAUST	: Necessary
MECHANICAL (GENERAL)	: Necessary
SPECIAL	: None
OTHER	: None

PERSONAL PROTECTIONS:

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers.
Wash at end of each workshift & before eating, smoking or using the toilet.
Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL DATA

APPEARANCE :		Liquid,Water-White	
ODOR :		Sharp,acid	
BOILING RANGE :	104 105 105 C / 220 221 222 F		
AUTO IGNITION TEMPERATURE :	Not Applicable		
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Applicable		
FLASH POINT (TEST METHOD):	Not Applicable		
FLAMMABILITY CLASSIFICATION:	Non-Combustible		
GRAVITY @ 60 F :			
SPECIFIC GRAVITY (Water=1) :		1.160	
POUNDS/GALLON :		9.663	
VOC'S (>0.44 Lbs/Sq In) :	0.0 Vol. % /	0.0 g/L /	0.000 Lbs/Gal
TOTAL VOC'S (TVOC) :	0.0 Vol. % /	0.0 g/L /	0.000 Lbs/Gal
NONEXEMPT VOC'S (CVOC) :	0.0 Vol. % /	0.0 g/L /	0.000 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS) :	31.5 Wt. % /	365.4 g/L /	3.043 Lbs/Gal
VAPOR PRESSURE (mm of Hg)@20 C		17.0	
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)		0.0	
VAPOR DENSITY (air=1) :		.8	
WATER ABSORPTION :		Complete	
pH (Neutrality) :		0.0	
REFRACTIVE INDEX :		1.323	
MIXED ANILINE POINT (Acid Insol):		-17 C / 0 F	

SECTION 10. STABILITY & REACTIVITY

STABILITY
Stable but Reacts with most metals producing hydrogen which is extremely flammable & may explode.

CONDITIONS TO AVOID
Isolate from oxidizers, alkalis, heat, & open flame.

MATERIALS TO AVOID
Isolate from alkalies, amines & non-resistant metals.

HAZARDOUS DECOMPOSITION PRODUCTS
Hydrogen Chloride, Phosgene from heating.

HAZARDOUS POLYMERIZATION
Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

MATERIAL	CAS #	TWA (OSHA)	TLV (ACGIH)	HAP
Water	7732-18-5	None Known	None Known	No
Hydrochloric Acid	7647-01-0	5 ppm	5 ppm	Yes

Each component showing `Yes' under "HAP" is an EPA Hazardous Air Pollutant.

SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

MATERIAL	CAS #	CEILING	STEL (OSHA/ACGIH)
Hydrochloric Acid	7647-01-0	None Known	5 ppm

ACUTE HAZARDS

EYE & SKIN CONTACT:
Severe burns to skin, defatting, dermatitis.
Severe burns to eyes,redness,tearing,blurred vision.
Liquid can cause Severe skin & eye burns . Wash thoroughly after handling.

INHALATION:
Severe respiratory tract irritation may occur. Vapor harmful.

SWALLOWING:
Harmful or fatal if swallowed.

SUBCHRONIC HAZARDS/CONDITIONS AGGREVATED

CONDITIONS AGGREVATED
Persons with severe skin,liver or kidney problems should avoid use.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:
This product has no carcinogens listed by IARC,NTP,NIOSH,
OSHA or ACGIH, as of this date, greater or equal to 0.1%.

SECTION 12. ECOLOGICAL INFORMATION

MAMMALIAN INFORMATION:
No mammalian information is available on this product.

AQUATIC ANIMAL INFORMATION:
No aquatic environmental information is available on this product.

MOBILITY
This material is a mobile liquid.

DEGRADABILITY
This product is partially biodegradable.

ACCUMULATION
This product does not accumulate or biomagnify in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws.
If questions exist, contact the appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING NAME: Hydrochloric acid,8,UN1789,PG-II
DRUM LABEL: (CORROSIVE)
IATA / ICAO: Hydrochloric acid,8,UN1789,PG-II
IMO / IMDG: Hydrochloric acid,8,UN1789,PG-II
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 157

SECTION 15. REGULATORY INFORMATION

EPA REGULATION:
SARA SECTION 311/312 HAZARDS: Acute Health

All components of this product are on the TSCA list.
SARA Title III Section 313 Supplier Notification
This product contains the indicated <*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

SECTION 15. REGULATORY INFORMATION (CONTINUED)

SARA TITLE III INGREDIENTS	CAS#	WT. % (REG. SECTION)	RQ(LBS)
*Hydrochloric Acid	7647-01-0	32 (302,311,312,313)	5000

IF > 8467 POUNDS OF THIS PRODUCT IS IN ONE CONTAINER THE "RQ" OF HYDROCHLORIC ACID IS EXCEEDED.

INTERNATIONAL REGULATIONS

The components of this product are listed on the chemical inventories of the following countries:
Australia, Canada, Europe (EINECS), Japan, Korea, United Kingdom.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:
HEALTH (NFPA): 3
HEALTH (HMIS): 3
FLAMMABILITY: 0
REACTIVITY: 0

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

EMPLOYEE TRAINING

Employees should be made aware of all hazards of this material (as stated in this MSDS) before handling it.

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications.
All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.
Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.
This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.