SAFETY DATA SHEET
Acid clean HF

Printed: 04/20/2015
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1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: MORGAN-012-BULK

Product Name: Acid clean HF

Company Name: Morgan-Gallacher, Inc.
8707 Millergrove Drive
Santa Fe Springs, CA 90670

Phone Number: +1 (562)695-1232

Emergency Contact: CHEMTREC

Phone Number: +1 (800)424-9300

2. HAZARDS IDENTIFICATION

Skin Corrosion/Irritation, Category 1B
Corrosive To Metals, Category 1
Acute Toxicity: Oral, Category 4
Serious Eye Damage/Eye Irritation, Category 1

GHS Signal Word: **Danger**

GHS Hazard Phrases:
H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.

GHS Precaution Phrases:
P102 - Keep out of reach of children.
P103 - Read label before use.
P262 - Do not get in eyes, on skin, or on clothing.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face prote.

GHS Response Phrases:
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P315 - Get immediate medical advice/attention. P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with plenty of water for 15 minutes.
P315 - Get immediate medical advice/attention. P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342 - If experiencing respiratory symptoms: P313 - Get medical advice/attention.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P315 - Get immediate medical advice/attention.

GHS Storage and Disposal Phrases:
P405 - Store locked up.
P501 - Dispose of contents/container in accordance to local, state and federal regulations.

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic):

Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes chemical burns to the respiratory tract.

Skin Contact: May be harmful if absorbed through the skin. Causes skin burns.

Eye Contact: Causes eye burns. Causes severe eye irritation. May cause painful sensitization to light.

Ingestion: Toxic if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
7647-01-0	Hydrochloric acid	<20.0 %
NA	Surfactant	<10.0 %

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

In Case of Inhalation: Remove from exposure and move to fresh air immediately. Get medical aid immediately.

In Case of Skin Contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical aid immediately.

In Case of Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

In Case of Ingestion: Wash mouth out with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If victim is conscious and alert, give 2-4 cupfuls of water. Get medical attention immediately.

Note to Physician: Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

5. FIRE FIGHTING MEASURES

Flash Pt: NA

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NA

Suitable Extinguishing Media: For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water fog to keep fire-exposed containers cool. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Flammable Properties and Hazards: No data available.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures: Use proper personal protective equipment as indicated in Section 8.

Environmental Precautions: Observe all federal, state, and local environmental regulations.

Steps To Be Taken In Case Material Is Released Or Spilled: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid breathing vapors, mist or gas. Evacuate personnel to safe areas.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapor or mist. Avoid ingestion and inhalation. Keep container tightly closed. Wash clothing before reuse. Wash thoroughly after handling.

Precautions To Be Taken in Store in a cool, dry, well-ventilated area away from incompatible substances. Store in a

Storing: tightly closed container. Keep container closed when not in use.

Other Precautions: Handle in accordance with good industrial hygiene and safety practice.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7647-01-0	Hydrochloric acid	CEIL: 5 ppm	CEIL: 2 ppm)	No data.
NA	Surfactant	No data.	No data.	No data.

Respiratory Equipment (Specify Type): Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 149 CFR 1910.133 or European Standard EN166. Wear chemical splash goggles.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [ ] Gas [X] Liquid [ ] Solid

Appearance and Odor: Color: orange.
Physical State: Liquid.

Melting Point: NA

Boiling Point: NA

Autoignition Pt: NA

Flash Pt: NA

Explosive Limits: LEL: No data. UEL: No data.

Specific Gravity (Water = 1): 1.07 - 1.09

Density: 9.00

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Evaporation Rate: No data.

Solubility in Water: No data.

pH: < 2.0

Percent Volatile: No data.

10. STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [X]

Conditions To Avoid - Instability: Extremes of temperature and direct sunlight. Incompatible materials.

Incompatibility - Materials To Avoid: Strong oxidizing agents, Strong reducing agents, Strong bases, chlorine.

Hazardous Decomposition or Byproducts: Hydrogen chloride gas, chlorine, carbon monoxide, carbon dioxide, irritating and toxic fumes and gases.

Possibility of Hazardous Will occur [ ] Will not occur [X]

Reactions:

Conditions To Avoid - Hazardous Reactions: No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information: Epidemiology: No information found.
Teratogenicity: No information available.
Reproductive Effects: No information found.
Neurotoxicity: No information found.
Mutagenicity: No information found.

CAS# NA: Surfactant: Acute toxicity, LD50, Oral, Rat, 960.0 - 3980. MG/KG. Result: Blood:Tumors. Immunological Including Allergic: Autoimmune (multiple organ involvement).
Acute toxicity, LD50, Dermal, Rabbit, 2000. - 2991. MG/KG. Result: Behavioral: Somnolence (general depressed activity). Vascular: BP lowering not charactertized in autonomic section. Skin and Appendages: Skin: After topical exposure: Corrosive.
Acute toxicity, LD50, Inhalation, Rat, 1.150 MG/L, 4 H. Result: Lungs, Thorax, or Respiration:Other changes. Gastrointestinal:Nausea or vomiting.

Irritation or Corrosion: Other Studies: CAS# 7647-01-0:
Acute toxicity, LD50, Oral, Rabbit, 900 mg/kg
Acute toxicity, LC50, Inhalation, Rat, 3124 ppm, 1 H.

Carcinogenicity/Other Information: CAS# 7647-01-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information: Environmental: No information available.
Physical: No information available.
CAS# NA: Surfactant: LC50, Fathead Minnow (Pimephales promelas), 3.800 - 6.200 MG/L, 96 H. Result: Affected fish stopped schooling behavior. Affected fish became hyperactive. Fish were overreactive to external stimuli. Affected fish swam at or near surface. No loss of equilibrium observed.
LC50, Water Flea (Daphnia magna), 9.300 - 21.40 MG/L, 48 H. Result: Affected fish stopped schooling behavior. Affected fish became hyperactive. Fish were overreactive to external stimuli. Affected fish swam at or near surface. No loss of equilibrium observed.

Results of PBT and vPvB assessment: Other Studies: CAS# 7647-01-0:
LC50, Western Mosquitofish (Gambina affinis), adult(s), 282000 ug/L, 24H, Mortality
LC50, Common Shrimp, Sand Shrimp (Crangon crangon), adult(s), 260000 ug/L, 48H, Mortality

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Observe all federal, state, and local environmental regulations.
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.
Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: HYDROCHLORIC ACID.
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN1789 **Packing Group:** II

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

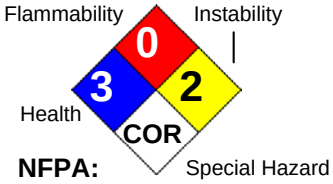
CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7647-01-0	Hydrochloric acid	Yes 500 LB	Yes 5000 LB	Yes
NA	Surfactant	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7647-01-0	Hydrochloric acid	TSCA: Yes - Inventory, 4 Test; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: Yes - 1012; NY Part 597: Yes; PA HSL: Yes - E
NA	Surfactant	TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No

16. OTHER INFORMATION

Revision Date: 10/12/2014

Hazard Rating System:



NFPA:

Additional Information About This Product: No data available.

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