

# SAFETY DATA SHEET

**Product Trade Name:** MC SS-5669

**Revision Date:** 04-Aug-2020

**Revision Number:** 12

## 1. Identification

### 1.1. Product Identifier

**Product Trade Name:** MC SS-5669  
**Synonyms:** None  
**Chemical Family:** Blend  
**Internal ID Code:** MC003102

### 1.2 Recommended use and restrictions on use

**Application:** Scale Dissolver  
**Uses advised against:** Consumer use

### 1.3 Manufacturer's Name and Contact Details

#### Manufacturer/Supplier

Multi-Chem Group LLC  
 A Halliburton Energy Services, Inc. Company  
 3000 N. Sam Houston Pkwy E., Houston, TX 77032  
 Phone: 1-281-871-4000

Halliburton Group Canada  
 645 - 7th Ave SW Suite 1800  
 Calgary, AB, T2P 4G8, Canada  
 Telephone: 1-403-231-9300

**Prepared By:** Chemical Stewardship  
 Telephone: 1-281-871-6107  
 e-mail: fdunexchem@halliburton.com

### 1.4. Emergency telephone number:

**Emergency Telephone Number:** 1-866-519-4752 or 1-760-476-3962 (accessible 24 hours a day / 7 days a week)  
 Global Incident Response Access Code: 334305  
 Contract Number: 14012

## 2. Hazards Identification

### 2.1 Classification in accordance with paragraph (d) of §1910.1200

Skin Corrosion / Irritation	Category 1 - H314
Serious Eye Damage/Irritation	Category 1 - H318
Specific Target Organ Toxicity - (Single Exposure)	Category 3 - H335
Substances/mixtures corrosive to metal	Category 1 - H290

### 2.2. Label Elements

**Hazard Pictograms**



**Signal Word:**

Danger

**Hazard Statements**

H290 - May be corrosive to metals  
 H314 - Causes severe skin burns and eye damage  
 H318 - Causes serious eye damage  
 H335 - May cause respiratory irritation

**Precautionary Statements**

**Prevention**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P271 - Use only outdoors or in a well-ventilated area  
 P234 - Keep only in original packaging.

**Response**

P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
 P363 - Wash contaminated clothing before reuse  
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Storage**

P310 - Immediately call a POISON CENTER or doctor/physician  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
 P405 - Store locked up

**Disposal**

P406 - Store in corrosive resistant container with a resistant inner liner.  
 P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

**2.3 Hazards not otherwise classified**

None known

**3. Composition/information on Ingredients**

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Hydrochloric acid	7647-01-0	10 - 30%	Skin Corr. 1B (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Met. Corr. 1 (H290)

The exact percentage (concentration) of the composition has been withheld as proprietary.

**4. First Aid Measures**

**4.1. Description of first aid measures**

<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
<b>Eyes</b>	In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Seek immediate medical attention/advice. Suitable emergency eye wash facility should be immediately available
<b>Skin</b>	In case of contact, immediately flush skin with plenty of soap and water for at least 30 minutes and remove contaminated clothing, shoes and leather goods immediately. Get medical attention immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

#### **4.2 Most important symptoms/effects, acute and delayed**

Causes severe skin irritation with tissue destruction. Causes severe eye irritation which may damage tissue. May cause respiratory irritation.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

### **5. Fire-fighting measures**

#### **5.1. Extinguishing media**

##### **Suitable Extinguishing Media**

Water fog, carbon dioxide, foam, dry chemical.

##### **Extinguishing media which must not be used for safety reasons**

Do NOT spray pool fires directly with water. A solid stream of water directed into hot burning liquid can cause splattering.

#### **5.2 Specific hazards arising from the substance or mixture**

##### **Special exposure hazards in a fire**

Decomposition in fire may produce harmful gases.

#### **5.3 Special protective equipment and precautions for fire-fighters**

##### **Special protective equipment for firefighters**

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

### **6. Accidental release measures**

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

Ensure adequate ventilation. Use appropriate protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing. Use only competent persons for cleanup. See Section 8 for additional information.

#### **6.2. Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

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

Dike far ahead of liquid spill for later disposal. Neutralize with soda ash or other non-reactive alkaline. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

### **7. Handling and storage**

#### **7.1. Precautions for safe handling**

##### **Handling Precautions**

Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Use appropriate protective equipment.

Avoid contact with eyes, skin, or clothing.

**Hygiene Measures**

Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Information**

Store in a well ventilated area. Store in original container. Store away from alkalis.

**8. Exposure Controls/Personal Protection**

**8.1 Occupational Exposure Limits**

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Hydrochloric acid	7647-01-0	Not applicable	Ceiling: 2 ppm

**8.2 Appropriate engineering controls**

**Engineering Controls**

Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits. Ensure adequate ventilation, especially in confined areas

**8.3 Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

**Respiratory Protection**

If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional. Acid gas respirator.

**Hand Protection**

Impervious gloves Manufacturer's directions for use should be observed because of great diversity of types.

**Skin Protection**

Wear impervious protective clothing, including boots, gloves, lab coat, apron, rain jacket, pants or coverall, as appropriate, to prevent skin contact.

**Eye Protection**

Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions**

Eyewash fountains and safety showers must be easily accessible.

**9. Physical and Chemical Properties**

**9.1. Information on basic physical and chemical properties**

<b>Physical State:</b> Liquid	<b>Color</b>	Clear to Slightly Hazy Colorless to Light Amber
<b>Odor:</b> Pungent	<b>Odor Threshold:</b>	No information available

<u>Property</u>	<u>Values</u>
Remarks/ - Method	
<b>pH:</b>	0.68 - 2.28 (10% in 1:1 IPA:H2O)
<b>Freezing Point / Range</b>	<0 °C / <32 °F
<b>Melting Point / Range</b>	No data available
<b>Pour Point / Range</b>	No data available <0 °C <32 °F
<b>Boiling Point / Range</b>	No data available
<b>Flash Point</b>	> 93 °C / > 200 °F

<b>Flammability (solid, gas)</b>	No data available
<b>Upper flammability limit</b>	No data available
<b>Lower flammability limit</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	1.025 - 1.080 (20 °C/68 °F)
<b>Water Solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available

**9.2. Other information**

<b>VOC Content (%)</b>	No data available
<b>Liquid Density</b>	8.54-9.00 lbs/gal
<b>Bulk Density</b>	1025-1080 kg/m <sup>3</sup>

**10. Stability and Reactivity****10.1. Reactivity**

Not expected to be reactive.

**10.2. Chemical stability**

Stable under recommended storage conditions

**10.3. Possibility of hazardous reactions**

Will Not Occur

**10.4. Conditions to avoid**

Excessive heat

**10.5. Incompatible materials**

Strong alkalis.

**10.6. Hazardous decomposition products**

Hydrogen chloride. Flammable hydrogen gas.

**11. Toxicological Information****11.1 Information on likely routes of exposure**

**Principle Route of Exposure** Eye contact. Skin contact. Inhalation. Ingestion.

**11.2 Symptoms related to the physical, chemical and toxicological characteristics****Acute Toxicity**

<b>Inhalation</b>	Causes severe respiratory burns.
<b>Eye Contact</b>	Causes serious eye damage.
<b>Skin Contact</b>	Causes severe burns.
<b>Ingestion</b>	Causes burns of the mouth, throat and stomach.

**Chronic Effects/Carcinogenicity** Prolonged, excessive exposure may cause erosion of the teeth.

**11.3 Toxicity data****Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrochloric acid	7647-01-0	No data available	No data available	No data available

Substances	CAS Number	Skin corrosion/irritation
Hydrochloric acid	7647-01-0	Causes severe burns

Substances	CAS Number	Serious eye damage/irritation
Hydrochloric acid	7647-01-0	Causes severe burns

Substances	CAS Number	Skin Sensitization
Hydrochloric acid	7647-01-0	Did not cause sensitization on laboratory animals (guinea pig)

Substances	CAS Number	Respiratory Sensitization
Hydrochloric acid	7647-01-0	No information available

Substances	CAS Number	Mutagenic Effects
Hydrochloric acid	7647-01-0	In vitro tests did not show mutagenic effects.

Substances	CAS Number	Carcinogenic Effects
Hydrochloric acid	7647-01-0	No data of sufficient quality are available.

Substances	CAS Number	Reproductive toxicity
Hydrochloric acid	7647-01-0	Embryo and fetotoxicity has been observed in female rats exposed to maternally toxic levels of hydrogen chloride (450 mg/m <sup>3</sup> , 1hr.). When tested at maternally toxic doses, no adverse effects on fertility, teratogenicity, or development were observed.

Substances	CAS Number	STOT - single exposure
Hydrochloric acid	7647-01-0	May cause respiratory irritation.

Substances	CAS Number	STOT - repeated exposure
Hydrochloric acid	7647-01-0	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	Aspiration hazard
Hydrochloric acid	7647-01-0	Not applicable

**12. Ecological Information****12.1. Toxicity****Ecotoxicity effects**

Product is not classified as hazardous to the environment.

**Substance Ecotoxicity Data**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Hydrochloric acid	7647-01-0	No information available	LC50 282 mg/L (Gambusia affinis) LC50 20.5 mg/L (Lepomis macrochirus) LC50 (96h) 3.25 – 3.5 (pH) (Lepomis macrochirus)	EC50 (3h) >= 5 and <= 5.5 (pH) (Activated sludge, domestic)	EC50 (48 h) 4.92 mg/L (Daphnia magna)

**12.2. Persistence and degradability**

Substances	CAS Number	Persistence and Degradability
Hydrochloric acid	7647-01-0	The methods for determining biodegradability are not applicable to inorganic substances.

**12.3. Bioaccumulative potential**

Substances	CAS Number	Bioaccumulation
Hydrochloric acid	7647-01-0	-2.65

**12.4. Mobility in soil**

Substances	CAS Number	Mobility
Hydrochloric acid	7647-01-0	No information available

**12.5 Other adverse effects**

No information available

**13. Disposal Considerations****13.1. Waste treatment methods**

**Disposal methods** Disposal should be made in accordance with federal, state, and local regulations.  
**Contaminated Packaging** Follow all applicable national or local regulations.

**14. Transport Information****US DOT**

**UN Number** UN1789  
**UN proper shipping name:** Hydrochloric Acid Solution  
**Transport Hazard Class(es):** 8  
**Packing Group:** II  
**Environmental Hazards:** Not applicable  
**NAERG:** NAERG 157

**Canadian TDG**

**UN Number** UN1789  
**UN proper shipping name:** Hydrochloric Acid Solution  
**Transport Hazard Class(es):** 8  
**Packing Group:** II  
**Environmental Hazards:** Not applicable

**IMDG/IMO**

**UN Number** UN1789  
**UN proper shipping name:** Hydrochloric Acid Solution  
**Transport Hazard Class(es):** 8  
**Packing Group:** II  
**Environmental Hazards:** Not applicable

**IATA/ICAO**

**UN Number** UN1789  
**UN proper shipping name:** Hydrochloric Acid Solution  
**Transport Hazard Class(es):** 8  
**Packing Group:** II  
**Environmental Hazards:** Not applicable

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable

**Special Precautions for User** None

**15. Regulatory Information**

## US Regulations

### US TSCA Inventory

All components listed on inventory or are exempt.

### TSCA Significant New Use Rules - S5A2

Substances	CAS Number	TSCA Significant New Use Rules - S5A2	TSCA Section 5(E) Consent Orders
Hydrochloric acid	7647-01-0	Not applicable	Not applicable

### EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Hydrochloric acid	7647-01-0	5000 lb

### EPA SARA (311,312) Hazard Class

Corrosive to metal

Skin Corrosion or Irritation

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

### EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Hydrochloric acid	7647-01-0	1.0%	Not applicable

### EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Hydrochloric acid	7647-01-0	5000 lb 2270 kg

### EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of:

Corrosivity D002

### California Proposition 65

Substances	CAS Number	California Proposition 65
Hydrochloric acid	7647-01-0	Not applicable

### U.S. State Right-to-Know Regulations

Substances	CAS Number	MA Right-to-Know Law	NJ Right-to-Know Law	PA Right-to-Know Law
Hydrochloric acid	7647-01-0	Extraordinarily hazardous	Present	Environmental hazard

**NFPA Ratings:**

Health 4, Flammability 0, Reactivity 1

**HMIS Ratings:**

Health 4, Flammability 0, Reactivity 1, PPE: X

## Canadian Regulations

**Canadian Domestic Substances** All components listed on inventory or are exempt.

List (DSL)

## 16. Other information

### Preparation Information

Prepared By

Chemical Stewardship  
Telephone: 1-281-871-6107  
e-mail: fdunexchem@halliburton.com



**Revision Date:** 04-Aug-2020

**Reason for Revision** SDS sections updated:  
1  
2  
8  
11  
15

**Additional information**

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

bw – body weight  
CAS – Chemical Abstracts Service  
d - day  
EC50 – Effective Concentration 50%  
ErC50 – Effective Concentration growth rate 50%  
h - hour  
LC50 – Lethal Concentration 50%  
LD50 – Lethal Dose 50%  
LL50 – Lethal Loading 50%  
mg/kg – milligram/kilogram  
mg/L – milligram/liter  
mg/m<sup>3</sup> - milligram/cubic meter  
mm - millimeter  
mmHg - millimeter mercury  
NIOSH – National Institute for Occupational Safety and Health  
NTP – National Toxicology Program  
OEL – Occupational Exposure Limit  
PEL – Permissible Exposure Limit  
ppm – parts per million  
STEL – Short Term Exposure Limit  
TWA – Time-Weighted Average  
UN – United Nations  
w/w - weight/weight

**Key literature references and sources for data**

[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)

**Disclaimer Statement**

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**End of Safety Data Sheet**