

## Safety Data Sheet

# LSR

### Section 1: Identification

#### GHS product identifier

Product name: LSR Product Code: 57

#### Recommended uses and uses advised against

Recommended use:

Descaling; removal of calcified buildup of lime or scale.

Uses not recommended:

Use on soft metals, delicate or softer surfaces not recommended.

#### Supplier details

Aleva Chemical, Inc.  
 1792 Latham St.  
 Memphis, TN 38106

Telephone (general)  
 Website:

(888)504-8178  
[alevachem.com](http://alevachem.com)

#### Emergency telephone number

Infotrac: (800) 535-5053

### Section 2: Hazard identification

#### United States (US)

According to OSHA 29 CFR 1910.1200 HCS

#### Classification of the substance or mixture

OSHA HCS 2012

Acute Toxicity 4 (Dermal)  
 Corrosive To Metals 1  
 Eye Damage/Irritation 1 (Irreversible Effects)

#### Label Elements

OSHA HCS 2012



#### Hazard Statements

H312 Harmful if in contact with skin.

H290 May be corrosive to metals.  
 H318 Causes serious eye damage.

#### Precautionary Statements

##### Prevention

P280 Wear protective gloves and protective clothing.  
 P234 Keep only in original container.  
 P280 Wear eye protection and/or face protection where applicable.

##### Response

P302 + P352 IF ON SKIN Wash with plenty of water.  
 P312 Call a POISON CONTROL CENTER if you feel unwell.  
 P362 + P364 Take off contaminated clothing and wash before reuse.  
 P321 Follow specific first aid instructions for this chemical.  
 P390 Absorb spillage to prevent material damage.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.  
 Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 P310 Immediately call a POISON CONTROL CENTER and seek medical attention.

Storage/Disposal

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.  
Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container per guidelines in section 13.  
P405 Store locked up.  
P403 + P233 Store in a well-ventilated place.

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

P501 Dispose of contents/container per guidelines in section 13. P405 Store locked up. P501 Dispose of contents/container per guidelines in section 13. P406 Store in corrosive resistant container or container with resistant inner liner.

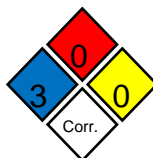
Other hazards

OSHA HCS 2012

No data available.

Other information

NFPA



Section 3: Composition/Information on Ingredients

Substances

Material does not meet the criteria of a substance.

Mixtures

Hydrochloric Acid	[Muriatic Acid] CAS No. 7647-01-0	8% - 26%
Nonionic Surfactants	[ ] CAS No. Not specified	0% - 5%

See section 11 for toxicological information.

Section 4: First-Aid Measures

Description of first aid measures

Inhalation:

Move victim to fresh air. Give artificial respiration if victim is not breathing.

Skin:

Immediately flush skin with running water for at least 20 minutes.

Eye:

Irrigate with water immediately. Seek medical attention.

Ingestion:

Call poison control center. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Refer to section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed:

All treatments should be based on observed signs and symptoms of distress in the patient.

## Section 5: Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media:

Streaming water.

Unsuitable extinguishing media:

No data available.

### Special hazards arising from the substance or mixture

Unusual fire and explosion hazards:

Material data lacking.

Hazardous combustion products:

Material data lacking.

Advice for firefighters

Use water spray to cool containers exposed to fire.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

Personal precautions:

Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch or walk through spilled material.

Emergency procedures:

As an immediate precautionary measure, isolate spill or leak for at least 50 meters.

Environmental precautions

Avoid run off to waterways and sewers.

### Methods and material for containment and clean-up

Stop leak if you can do it without risk.

## Section 7: Handling and Storage

### Precautions for safe handling

Handling:

Follow general workplace safety guidelines.

### Conditions for safe storage, including any incompatibilities

Storage:

Store at or near room temperature. Keep container closed when not in use.

Incompatible materials or ignition sources:

Material data lacking

## Section 8: Exposure Controls/Personal Protection

### Control parameters

Component	Result	Exposure Limits/Guidelines		
		NIOSH	ACGIH	Canada Ontario
Hydrochloric Acid CAS No. 7647-01-0	STELs	N/A	N/A	Data lacking
	TWAs	N/A	N/A	Data lacking
Nonionic Surfactants CAS No. Not specified	STELs	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.	Data lacking
	TWAs	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.	Data lacking

### Exposure controls

Engineering measures and controls:

Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable exposure limit values.

Incompatible materials or ignition sources:

Pictograms:



Respiratory:

Not required.

Eye and face:

Must wear goggles when using this product.

Hands:

Skin and body: Must wear chemical protective gloves when using this product.  
 General industrial hygiene considerations: Chemical protective clothing recommended when using this product.  
 Environmental exposure controls: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling.  
 Follow best practice for site management and disposal of waste. Avoid release to the environment.

**Key to Abbreviations**  
 AICGHI= American Conference of Governmental Industrial Hygiene  
 OSHA =Occupational Safety and Health Administration  
 MSHA = Mine Safety and Health Administration  
 TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures  
 NIOSH= National Institute of Occupational Safety and Health  
 STEV = Short Term Exposure Value  
 STEL = Short Term Exposure Limits are based on 15-minute exposures

## Section 9: Physical and Chemical Properties

### Information on physical and chemical properties

Material Description				
Physical Form	Liquid		Appearance/Description	Opaque
Color	Deep brown/red		Odor	Moderate acidic odor
Taste	Data lacking		Particulate Type	Not relevant
Particulate Size	Not relevant		Aerosol Type	Not relevant
Odor Threshold	Data lacking		Physical and Chemical Properties	Data lacking
General Properties				
Boiling Point	> 212 F		Melting Point	Data lacking
Decomposition Temperature	Data lacking		Heat of Decomposition	Data lacking
pH	< 2		Specific Gravity/Relative Density	1.038
Density	Data lacking		Bulk Density	Data lacking
Water Solubility	Soluble		Solvent Solubility	Not applicable
Viscosity	Data lacking		Explosive Properties	Classification criteria not met
Oxidizing Properties:	Data lacking			
Volatility				
Vapor Pressure	Data lacking		Vapor Density	Data lacking
Evaporation Rate	1		VOC (Wt.)	Data lacking
VOC (Vol.)	Data lacking		Volatiles (Wt.)	Data lacking
Volatiles (Vol.)	Data lacking			
Flammability				
Flash Point	Not applicable		UEL	Not applicable
LEL	Data lacking		Autoignition	Not applicable
Self-Accelerating Decomposition Temperature (SADT)	Data lacking		Heat of Combustion (ΔHc)	Not applicable
Burning Time	Not applicable		Flame Duration	Not applicable
Flame Height	Not applicable		Flame Extension	Not applicable
Ignition Distance	Not applicable		Flammability (solid, gas)	Not applicable
Environmental				
Half-Life	Data lacking		Octanol/Water Partition coefficient	Data lacking
Coefficient of water/oil distribution	Data lacking		Bioaccumulation Factor	Data lacking
Bioconcentration Factor	Data lacking		Biochemical Oxygen Demand BOD/BOD5	Data lacking
Chemical Oxygen Demand	Data lacking		Persistence	Data lacking
Degradation	Data lacking			

## Section 10: Stability and Reactivity

### Reactivity

Material data lacking.

Chemical stability Material data lacking.  
 Possible hazardous reactions Material data lacking.  
 Conditions to avoid Material data lacking.  
 Incompatible materials Material data lacking.  
 Hazardous decomposition products Material data lacking.

**Section 11: Toxicological Information**

Information on toxicological effects

Component	CAS No.	Data
Hydrochloric Acid	7647-01-0	DERMAL LD50 Rabbit > 5010 mg/kg, ORAL LD50 Rat 700 mg/kg Data lacking Data lacking
Nonionic Surfactants	Not specified	Dermal LD50: 1800 µL/kg ( Rabbit ) Data lacking Data lacking

Target organs No data available.  
 Routes of entry and/or exposure No data available.  
 Potential health effects  
 Inhalation  
 Acute (immediate): No data available.  
 Chronic (delayed): No data available.  
 Skin  
 Acute (immediate): No data available.  
 Chronic (delayed): No data available.  
 Ingestion  
 Acute (immediate): No data available.  
 Chronic (delayed): No data available.  
 Eye  
 Acute (immediate): No data available.  
 Chronic (delayed): No data available.

**Section 12: Ecological Information**

Toxicity Material data lacking.  
 Persistence and degradability Material data lacking.  
 Bioaccumulative potential Material data lacking.  
 Mobility in soil Material data lacking.  
 Other adverse effects No studies have been found.  
 Other information No additional information available.

**Section 13: Disposal Considerations**

Waste treatment methods

Product waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Do not reuse container, keep used container tightly closed during storage. Container may contain dangerous product residue.

## Section 14: Transport Information

Special precautions for user

Contain spills immediately, do not allow liquid to sit in contact with surrounding surfaces.

Transport in bulk according to annex II of MARPOL 73/78 and the IBC code

## Section 15: Regulatory Information

Safety, health and environmental regulations specific to substance or mixture

SARA hazard classifications:

This material contains Muriatic Acid which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

## Section 16: Other Information

Last revision date:

6/15/2015

Preparation date:

7/17/2018

Disclaimer and statement of liability:

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.