

Safety Data Sheet

CRC-225

Descaler

1. PRODUCT & COMPANY IDENTIFICATION

Product Identifier

Product Name Descaler

Other means of identification

SDS # CRC-225

Product Code CRC-225

UN/ID No UN1789

Recommended use of the chemical and restrictions on use

Recommended Use Descaler

Details of the supplier of the safety data sheet

Manufacturer Address

Colonial Research Chemical Corp.

PO Box 609

Norfolk, NE 68702-0609

Emergency Telephone Number

Company Phone Number: 402-379-0100

Emergency Telephone: (24 hr) 800-535-5053



Specialty Products Since 1970

2. HAZARDS IDENTIFICATION

Appearance: Pink liquid

Physical State: Liquid

Odor: Pungent, irritating

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

Signal Word

Danger

Hazard Statements

Harmful if swallowed

Toxic if inhaled

Causes severe skin burns and eye damage

May cause respiratory irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a poison center or doctor/physician

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

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

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a poison center or doctor/physician

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do not induce vomiting

Precautionary Statements - Storage

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

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Hydrochloric acid	7647-01-0	60-80
Ethoxylated Nonylphenol	9016-45-9	1-5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Flush with water for 15 minutes lifting upper and lower eyelids. Call a physician.
Skin Contact	Remove contaminated clothing and wash with soap and water for 15 minutes.
Inhalation	Move to fresh air immediately. If breathing stops, administer CPR.
Ingestion	Rinse mouth. Give large amounts of water. DO NOT induce vomiting. Get immediate medical attention.

Most important symptoms and effects

Symptoms	Eyes: Liquid can cause eye irritation, severe burns and permanent damage. Skin: Hydrogen chloride vapor can rapidly cause burning of skin. Inhalation: Hydrogen chloride gas can cause irritation of respiratory tract. Ingestion: May cause burns to mouth.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Medical conditions aggravated: Asthma, bronchitis, emphysema and other lung conditions and chronic nose, sinus and throat conditions.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product is not flammable or combustible.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. All containers should be cooled with water to prevent vapor pressure build up.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Evacuate immediate area where fumes are present. Wear protective clothing as described in Section 8 of this safety data sheet.
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Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Neutralize the spilled product with soda ash. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Read all directions on label of container before using. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink, smoke, or apply cosmetics while handling this product. Use only with adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8.
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Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Store locked up.

Incompatible Materials Metals, alkalis and phosphates.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric acid 7647-01-0	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m ³ Ceiling: 5 ppm Ceiling: 7 mg/m ³	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m ³

Appropriate engineering controls

Engineering Controls Local exhaust is sufficient. Mechanical is recommended.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Goggles.

Skin and Body Protection Acid proof apron and rubber shoes should be worn. Rubber gloves.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid
Appearance Pink liquid
Color Pink
Odor Pungent, irritating
Odor Threshold Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not available	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	110 °C / 230 °F	
Flash Point	None	
Evaporation Rate	1	(butyl acetate = 1)
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not available	
Vapor Density	Not determined	
Specific Gravity	1.12	
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions. Do not mix with other chemicals

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid

Contact with bases can cause violent reactions generating large amounts of heat.

Incompatible Materials

Metals, alkalis and phosphates.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Inhalation	Toxic if inhaled. May cause irritation to the mucous membranes and upper respiratory tract.
Ingestion	Harmful if swallowed. Ingestion may cause irritation of the mucous membranes, esophagus, and stomach.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid 7647-01-0	= 700 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 3124 ppm (Rat) 1 h
Ethoxylated Nonylphenol 9016-45-9	= 1310 mg/kg (Rat)	= 2 mL/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrochloric acid 7647-01-0		Group 3		

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

STOT - single exposure May cause respiratory irritation.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrochloric acid 7647-01-0		282: 96 h Gambusia affinis mg/L LC50 static		

Persistence/Degradability

Hydrochloric Acid: When released into the soil, this material is not expected to biodegrade and may leach into groundwater. This material is expected to be toxic to aquatic life.

Nonylphenol Ethoxylate: This product is biodegradable, but it can be dangerous if allowed to enter waterways, including water supplies, lakes, streams, ponds, or rivers.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

DOT

UN/ID No	UN1789
Proper Shipping Name	Hydrochloric acid solution
Hazard Class	8
Packing Group	II
Reportable Quantity (RQ)	5000 lbs for Hydrochloric acid

15. REGULATORY INFORMATION

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hydrochloric acid 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Hydrochloric acid - 7647-01-0	7647-01-0	60-80	1.0

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrochloric acid 7647-01-0 (60-80)	5000 lb			X

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hydrochloric acid 7647-01-0	X	X	X

16. OTHER INFORMATION

NFPA	Health Hazards	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
HMIS	Health Hazards	Flammability	Physical Hazards	Personal Protection
	3	0	2	G

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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