10/04/2017





1 Identification

Product Identifier 100001-1-401-2

Trade Name: Rust & Hard Water Stain Remover Concentrate

Application of the Substance / the Mixture: Removal of Rust, Mineral Build-up, Calcium, Magnesium, Lime, Salts, Hard Water Spots, Efflorescence, Mildew Stains, Organic Deposits, Various Minerals.

Details of the Supplier of the Safety Data Sheet Manufacturer/Supplier:

ORANGE CHEMICAL COMPANY, LLC. 1545 West 200 South Suite 200

Lindon, UT 84042 Tel: 800-714-1325

Information Department: Product Safety Department

Emergency Telephone Number:

Infotrac 800-535-5053

2 Hazard(s) Identification

Classification of the Substance or Mixture

Nonhazardous

Classification According to Directive 67/548/EEC or Directive 1999/45/EC: Not applicable.

Information Concerning Particular Hazards for Human and Environment:

This product does not have to be labeled due to the calculation procedure of international guidelines.

Classification System:

The classification was made according to the latest editions of international substance list, and expanded upon from company literature data.

Label Elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms: No hazardous components.

Signal word Warning: None. Hazard statements: None. **Precautionary statements**

Specific treatment (see on this label). Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

In case of contact with eyes, rinse immediately with plenty of water for 20 minutes. If eye irritation persists: Get

medical advice/attention.

If swallowed: Rinse mouth. Do NOT induce vomiting.

In case of fire: Use for extinction: CO2, powder or water spray.

IF ON SKIN: Wash with plenty of soap and water.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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Trade Name: Rust & Hard Water Stain Remover Concentrate

Classification System:

NFPA Ratings (scale 0 - 4)



Health = 1 Fire = 0 Reactivity = 0

HMIS Rating (scale 0 – 4)



Health = 1 Fire = 0 Reactivity = 0

Other hazards:

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition/Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous Components: No hazardous components.

4 First-Aid Measures

Description of First Aid Measures

General Information: No special measures required.

After Inhalation: Move to fresh air. If irritation develops and persists, contact a physician.

After Skin Contact:

Remove affected clothing. Wash skin thoroughly with soap and water. If irritation develops and persists, contact a physician.

After Eye Contact:

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

After Swallowing:

Do not induce vomiting. May cause chemical pneumonia if aspirated into lungs.

Information for Doctor

Most important symptoms and effects, both acute and delayed:

No further relevant information available.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5 Fire-Fighting Measures

Extinguishing Media

Suitable extinguishing Agents: Treat as Oil Fire CO2, dry chemical foam.

Special hazards arising from the substance or mixture

At temperatures, above 60 °C/140° F acid action on most metals may release hydrogen, a highly flammable and explosive gas.

Advice for Firefighters

Protective Equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Not required.

Environmental Precautions: No special measures required. Methods and Material for Containment and Cleaning Up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other Sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and Storage

Handling:

Precautions for Safe Handling:

No special measures required.

Avoid prolonged skin contact. Wash affected skin after using.

Information about Protection against Explosions and Fires:

Store in tightly closed, original container away from flame or other ignition source.

Conditions for Safe Storage, Including any Incompatibilities

Store in dry, cool (above freezing) and well-ventilated area.

Storage:

Requirements to be met by Storerooms and Receptacles:

Information about storage in a on common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional Information about design of Technical Systems: No further data; see item 7.

Control Parameters

Components with Limit Values that Require Monitoring at the Workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure Controls

Personal Protective Equipment:

General Protective and Hygienic Measures:

The usual precautionary measures for handling chemicals should be followed.

Breathing Equipment: Avoid breathing mist.

Protection of Hands: Gloves recommended for over-exposure.

Material of Gloves: Chemical resistant gloves.

Eye Protection: Goggles recommended based on splash potential.

9 Physical and Chemical Properties

Information on Basic Physical and Chemical Properties		
General Information		
Appearance:		
Form:	Fluid	
Color:	Light to Dark Amber	
Odor:	Light Acidic/Soapy	
pH-Value:	<1	
Change in Condition		
Boiling Point/Boiling Range	100°C (212°F)	
Flash Point:	Not applicable.	
Flammability (solid, gaseous):	Non-Flammable.	

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Auto Ignition:	Product is not self-igniting	
Danger of Explosion:	Product does not present an explosion hazard.	
Explosion Limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor Pressure:	Not determined.	
Weight per Gallon:	10.29 lbs/gal	
Specific Gravity:	1.23	
Evaporation Rate:	(BuAc_1) <.01	
Solubility in / Miscibility with		
Water:	Completely miscible in water.	
Other Information:	No further relevant information available.	

10 Stability and Reactivity

Reactivity: Not determined. Chemical Stability: Stable

Thermal decomposition / Conditions to be Avoided: No decomposition if used according to specifications.

Possibility of Hazardous Reactions: No dangerous reactions known. **Conditions to Avoid:** Keep away from heat or source of ignition.

Incompatible Materials: Reactive or incompatible with the following materials: oxidizing materials. This material

may be extremely hazardous in contact with chlorates and nitrates. Contact with

hypochlorites (eq. Chlorine bleach, sulfides or cyanides) will liberate toxic gases. Contact

with alkaline materials (eq. Aqua ammonia) will generate heat.

Hazardous Decomposition Products: CO, CO2

11 Toxicological Information

Information on toxicological effects

Acute toxicity:

LD/LC5O values that are relevant for classification:

Rust & Hard Water Stain Remover Concentrate

Oral LD50 1120.9 mg/kg (rat) **Primary irritant effect:**

on the skin: Mild skin Irritant (OECD 404) on the eye: Eye Corrosive (OECD 405) Sensitization: No sensitizing effects known.

Carcinogenic Categories

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological Information

Toxicity

Ingredient Name: Organic acid salt Result: Acute LC50 71 mg/L Species: Ceriodaphnia dubia Exposure: 48hrs **Ingredient Name:** Organic acid salt Result: Acute LCO >142mg/L Species: Rainbow Trout Exposure: 96hrs

Aquatic Toxicity: No further relevant information available.

Persistence and Degradability: No further relevant information available.

Behavior in Environmental Systems

Bioaccumulative Potential: No further relevant information available.

Mobility in Soil: No further relevant information available.

Additional Ecological Information

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Trade Name: Rust & Hard Water Stain Remover Concentrate

General Notes: Biodegradable

Results of PBT and vPvB Assessment

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Waste Treatment Methods

Recommendation:

Biodegradable

This product has been evaluated for RCRA characteristics and does not meet the criteria for a hazardous waste, if discarded in its purchased form.

Uncleaned Packaging

Recommendation: Disposal must be made according to official regulations.

14 Transportation Information

UN-Number	N/A
DOT, ADN, IMDG, IATA	Not Regulated.
UN Proper Shipping Name	Not Regulated.
DOT, ADN, IMDG, IATA	Not Regulated.
Transport Hazard Class(es)	
DOT, ADN, IMDG, IATA Class	Not Regulated.
Packaging Group	Not Regulated.
DOT, IMGD, IATA	Not Regulated.
Environmental Hazards	
Marine Pollutant	No
Special Precautions for Users	Not Applicable.
Transport in Bulk According to ANNEX II of	
MARPOL 73/78 and the IBC Code	Not Applicable.
UN "Model Regulation"	-

15 Regulatory Information

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

SARA

Section 355 (Extremely Hazardous Substance):

None of the ingredients is listed.

Section 313 (Specific Toxic Chemical Listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

None of the ingredients is listed.

Proposition 65

Chemicals Known to Cause Cancer:

None of the ingredients is listed.

Chemicals Known to Cause Reproductive Toxicity for Females:

None of the ingredients is listed.

Chemicals Known to Cause Reproductive Toxicity for Males:

None of the ingredients is listed.

Chemicals Known to Cause Developmental Toxicity:

None of the ingredients is listed.

Carcinogenic Categories

EPA (Environmental Protection Agency)

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None of the ingredients is listed.

TLV (Threshold Limit Values Established y ACGIH)

None of the ingredients is listed.

NIOSH-Ca (National institute for Occupational Safety & Health)

None of the ingredients is listed.

Product Related Hazard Information:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials

Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

16 Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department Issuing SDS: Environmental Protection Department.

Contact: Regulatory Department

Date of Preparation / Last Revision: 10/04/2017

Abbreviations and Acronyms:

ADR: Accord Europeen Sur le transport des Marchandises Dangereuses par Route (European Agreement

concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation **IATA**: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists.

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

CAS: Chemical Abstracts Service (Division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal Concentration, 50 percent

LD50: Lethal Dose, Acute Tox. 4: Acute toxicity, Hazard Category 4