

# MATERIAL SAFETY DATA SHEET

Revised date: 22/02/2017

## 1. PRODUCT NAME AND IDENTIFICATION

Product Name: JCP 101 SCALE REMOVER  
 Chemical Name & Synonyms: N/A  
 CAS Number: N/A, Mixture  
 Company Name: JCP GROUP (THAILAND) CO., LTD.  
 Tel & Fax: +(66)34-412-824      Emergency: +(66)85-105-6034

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS#	% by Wt.	OSHA TWA (ppm)	ACGIH-TWA (ppm)
HYGROCHLORIC ACID	7647-01-0	1 – 30%	N/A	N/A

## 3. HAZARDS IDENTIFICATION

**Emergency overview:** Can cause irritation or damage to eyes and skin. Harmful if swallowed.

**Routes of Exposure:** Inhalation: [✓]      Ingestion: [✓]      Absorption: [✓]

**Eyes:** Causes irritation and, with extended contact, burns. Can result in severe damage.

**Skin:** Causes irritation with reddening and itching.

**Ingestion:** Causes irritation to the mucous membranes or other tissues contacted.

**Inhalation:** Irritating to the respiratory tract.

**Carcinogenicity:** Contains no listed carcinogens.

## 4. FIRST AID MEASURES

**Eyes:** Flush with clean cool water for 15 minutes holding eyelids open. See a physician immediately.

**Skin:** Immediately flush skin with plenty of water while removing contaminated clothing and boots. See a physician.

**Ingestion:** Drink plenty of water or milk. Do not induce vomiting. See a physician immediately.

**Inhalation:** Remove to fresh air. If not breathing give artificial respiration. See a physician

## 5. FIRE FIGHTING MEASURES

**Hazardous Combustion Products:** If dried residues of this product are heated, they may release hydrogen gas which could create an explosion hazard.

**General Hazards:** No hazards to be specially mentioned.

**Extinguishing Media:** Water, ABC dry chemical.

**Fire Fighting Instructions:** prolonged contact with reactive metals, such as aluminum, copper, brass, bronze, chromium, magnesium, tin, zinc, and alloys, can cause the formation of flammable hydrogen gas which can form an explosive mixture with air. Use care as spills may be slippery. Normal firefighting procedures apply. Self-contained breathing apparatus should be worn.

## Other Information

**Flash Points:** Not Applicable

**Autoignition Temperature:** Not Applicable

**Flammability Limits in Air (% by volume):** Not Applicable

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## 6. ACCIDENTAL RELEASE (SPILL MEASURES)

**Personal precautions:** No conditions to be specially mentioned.

**Environmental precautions:** Do not allow material to contaminate ground water system. Prevent product from entering drains.

**Methods for cleaning up / Methods for containment:** Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations. Keep in suitable, closed containers for disposal. Contaminated surfaces will be extremely slippery.

**Additional advice:** For personal protection see section 8.

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## 7. HANDLING AND STORAGE

### Handling

**Advice on safe handling:** For personal protection see section 8. No special handling advice required.

**Advice on protection against fire and explosion:** Normal measures for preventive fire protection.

### Storage

**Requirements for storage areas and containers:** Keep container tightly closed in a dry and well-ventilated place. Do not freeze.

**Advice on common storage:** No special restrictions on storage with other products.

**Other data:** No decomposition if stored and applied as directed.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Good general ventilation.

**Eye Protection:** Chemical goggles with face shield.

**Skin Protection:** Neoprene or natural rubber gloves

**Respiratory Protection:** Use only NIOSH/MSHA approved respiratory protection if exposure guideline might be exceeded.

**Other Protective Equipment:** As required to minimize skin contact. Eye wash, safety shower

**Exposure Guidelines:** None established

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## 9. PHYSICAL AND CHEMICAL PROPERTIES (Typical)

**Appearance and Odor:** amber liquid, slight characteristic odor.

**pH:** 0.3

**Melting point/range:** 0 °C

**Boiling point/boiling range:** 105 °C

**Flash point:** N/A

**Ignition temperature:** N/A

**Vapor pressure:** 14.2 mmHg

**Relative vapor density:** 0.7

**Density:** 1,160 kg/m<sup>3</sup> at 25 °C

**Relative density:** 1.16 at 25 °C

**Water solubility:** Complete

**Evaporation rate:** N/A

**Flammability (solid, gas):** N/A

**Lower explosion limit:** 4%

**Upper explosion limit:** 75%

**Auto-ignition temperature:** N/A

**Decomposition temperature:** N/A

**Oxidizing properties:** The substance or mixture is not classified as oxidizing.

**Solubility in other solvents:** N/A

**Partition coefficient:** N/A

**Viscosity, dynamic:** N/A

**Viscosity, kinematic:** N/A

**Explosive properties:** Not explosive

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

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## 10. STABILITY AND REACTIVITY

**Conditions to avoid:** Avoid temperatures above 60°C, direct sunlight and contact with sources of heat.

**Materials to avoid:** Mild steel, Oxidizing agents

**Hazardous decomposition products:** No hazardous decomposition products are known.

**Thermal decomposition:** No data available

**Reactivity:** Stable under normal conditions.

**Chemical stability:** Stable under recommended storage conditions.

**Hazardous reactions:** No dangerous reaction known under conditions of normal use.

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## 11. TOXICOLOGICAL INFORMATION

Hydrochloric Acid

Orl-Rat LD50: 900 mg/kg

Ihl-Rat LC50: 3124 ppm/1h

Skn-Hmn SDT: 4%/24h mild

Eye-Rbt rinsed with water: 5 mg/30s mild

Exposures of 100 ppm for 6 hrs a day for 50 days caused only slight unrest and irritation to the eyes and nose of rabbits, guinea pigs, and pigeons. The hemoglobin content of the blood was also slightly diminished. Monkeys receiving 20 exposures of 33 ppm for 6 hrs did not display any adverse effects. Higher exposures have caused weight loss which paralleled the severity of exposure. Baboons exposed to 500, 5000, or 10,000 ppm for 15 Minutes did not have significant alterations in any pulmonary function parameters 3 days or 3 months after exposure. In humans, long term overexposures have been associated with erosion of teeth.

Two studies on rats were conducted to determine if hydrochloric acid increased the formation of nasal tumors or increased the carcinogenic potential of formaldehyde. In both studied the rats were exposed to 10 ppm for 6 hours a day, 5 days a week. one study lasted 84 weeks while the other lasted the animals' lifetime. Hydrogen chloride did not cause an increase in nasal tumors and did not increase the carcinogenicity of formaldehyde.

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicology Assessment**

**Additional ecological information:** None known.

**Elimination information (persistence and degradability)**

**Bioaccumulation:** Bioaccumulation is unlikely.

**Mobility:** No data available

**Biodegradability:** Result: Not readily biodegradable.

## Further information on ecology

Biochemical Oxygen Demand (BOD): No data available.

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## 13. DISPOSAL CONSIDERATIONS

Dispose of in an approved hazardous waste container. Dispose must comply with local state and federal regulations with respect to disposal or discharge.

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## 14. TRANSPORT INFORMATION

### International Regulation

**ADR:** Not regulated as a dangerous good

**UNRTDG:** Not regulated as a dangerous good

**IATA-DGR:** Not regulated as a dangerous good

**IMDG-Code:** Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable for product as supplied.

**Further information for transport:** Not classified as dangerous in the meaning of transport regulations.

**NCh 2190/382:** Not regulated as a dangerous good

**Land transport:** Not regulated as a dangerous good.

**DOT Description:** Not regulated as a dangerous good.

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## 15. REGULATORY INFORMATION

### Notification status explanation

<b>CH INV</b> Switzerland. New notified substances and declared preparations	[ ]
<b>TSCA</b> United States TSCA Inventory	[✓]
<b>DSL</b> Canadian Domestic Substances List (DSL)	[✓]
<b>AICS</b> Australia Inventory of Chemical Substances (AICS)	[✓]
<b>NZIoC</b> New Zealand. Inventory of Chemical Substances	[✓]
<b>ENCS</b> Japan. ENCS - Existing and New Chemical Substances Inventory	[✓]
<b>ISHL</b> Japan. ISHL - Inventory of Chemical Substances	[✓]
<b>KECI</b> Korea. Korean Existing Chemicals Inventory (KECI)	[ ]
<b>PICCS</b> Philippines Inventory of Chemicals and Chemical Substances (PICCS)	[ ]
<b>IECSC</b> China. Inventory of Existing Chemical Substances in China (IECSC)	[ ]

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## 16. OTHER INFORMATION

The above information is based on data available to us and is believed to be correct. However, no warranty, merchantability, fitness for any use or any other warranty is expressed or to be implied regarding the accuracy of these data, the result to be obtained from the use thereof, the hazards connected with the use of the material, or that any such use will not infringe any patent. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility resulting from its use. This information is furnished upon the condition that the person receiving it shall make his own determination for the suitability of the material for his particular purposes.

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