

## Safety Data Sheet

**SDS ID: Stock Code FLOW**

**Revision date:** April 27, 2017

### Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** FLOW-AIDE Biodegradable System Descaler

**Synonyms:** Aqueous water scale cleaner/descaler

**Chemical family:** N/A

**Producer:** J.C. Whitlam Manufacturing Company

200 West Walnut Street

P.O. Box 380

Wadsworth, Ohio 44282-0380

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

**Telephone:** 330-334-2524 Available during normal business hours

**Emergency:** 330-334-2524 Available during normal business hours

### Section 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

May be harmful if swallowed. Causes mild skin irritation. Causes eye irritation.

**GHS Label elements, including precautionary statements:**



**Warning**

**Precautionary Statements:** P280: Wear protective gloves and eye protection.  
P281: Use personal protective equipment as required.  
P302+P352: IF ON SKIN: Wash with soap and water.  
P321: Specific treatment, see section 4 of this SDS.  
P332+P313: If skin irritation occurs, get medical attention.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes, remove contact lenses if present and easy to do, continue rinsing.  
P337+P313: If eye irritation persists, get medical attention.

**Inhalation:** Inhalation of mist or spray may cause mild irritation of the respiratory tract.

**Ingestion:** May be harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting, and diarrhea.

**Skin Contact:** May cause mild to moderate irritation. Repeated and prolonged use may result in drying or cracking of skin or dermatitis.

**Eye Contact:** Causes moderate to severe eye irritation. Symptoms include redness, stinging, tearing and swelling.

### Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Material information:**

Name	CAS No.	Weight %
Hydrogen Chloride, aqueous	7647-01-0	<10

*\*Note: The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.*

### Section 4. FIRST AID MEASURES

- Inhalation:** Product is not designed to be misted, however, if product mist causes respiratory irritation or distress, move the exposed person to fresh air immediately. If irritation persists, seek medical attention.
- Skin contact:** Wash affected area with soap and water. If irritation persists, seek medical attention.
- Ingestion:** Do NOT induce vomiting, drink milk, egg whites, etc. and seek immediate medical attention.
- Eye contact:** Immediately flush eyes with large amounts of water for 15 minutes. Remove contact lenses if present, after the first 5 minutes and continue rinsing. If irritation persists, seek medical attention.

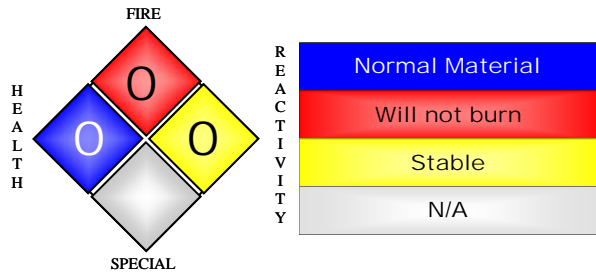
### Section 5. FIREFIGHTING MEASURES

**Suitable extinguishing media:** Use extinguishing media suitable for the surrounding fire.

**Specific hazards:** None known.

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus (pressure demand, MSHA/NIOSH approved or equivalent and full protective gear).

	NFPA rating:	HMIS rating:
Health:	0	0
Flammability:	0	0
Instability/reactivity:	0	0
Other:	N/A	N/A



## Section 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Wear appropriate protective clothing designated in Section 8. Ventilate the area.
<b>Large Spill:</b>	Rinse area with copious amounts of water to dilute. Sodium bicarbonate may also be used to absorb and/or neutralize liquid. Dispose of material in accordance with the local, State, Provincial, and Federal regulations for your location.
<b>Methods for Containment and Clean up</b>	Absorb with liquid binding material.

## Section 7. HANDLING AND STORAGE

<b>Handling:</b>	Observe label precautions. Wear all appropriate protective equipment specified in Section 8. Keep containers closed when not in use.
<b>Storage:</b>	Keep in cool, dry, ventilated storage areas in closed containers. Transfer only to approved containers having correct labeling. Containers that have been opened should be carefully resealed and kept upright to prevent leakage. The recommended storage temperature is between -12°C/10°F and 81°C/180°F. Keep out of reach of children.

## Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational Exposure Limits:** Contains no substances with occupational exposure values.

**Engineering Measures:** Maintain general industrial hygiene practices. Use normal exhaust, vent to atmosphere. Facilities storing or using this material should be equipped with an eyewash station.

### PERSONAL PROTECTIVE EQUIPMENT

**Respiratory protection:** None required under normal operating conditions, even when materials vapors and/or mists occur.

**Skin and body protection:** Recommended however not mandated. Material is non-toxic and can be held in the open hand without risk.

**Eye protection:** Wear protective goggles or safety glasses during use.

**Hygiene measures:** Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Yellow liquid
<b>Physical state (solid/liquid/gas):</b>	Liquid
<b>Substance type (pure/mixture):</b>	Mixture
<b>Color:</b>	Yellow
<b>Odor:</b>	Citrus
<b>Molecular weight:</b>	Not Available
<b>pH:</b>	Unreadable, generally <3
<b>Boiling point/range (5-95%):</b>	213°F (101°C) @760 mm Hg
<b>Melting point/range:</b>	Not Available
<b>Decomposition temperature:</b>	Not Available
<b>Specific gravity:</b>	1.045
<b>Vapor density:</b>	>1
<b>Vapor pressure:</b>	30 Torr.
<b>Evaporation rate (Butyl acetate= 1):</b>	Slow
<b>Flash point, method used:</b>	Not flammable
<b>Water solubility:</b>	Miscible
<b>VOC Content:</b>	0
<b>Auto-ignition temperature:</b>	Not Available
<b>Flammable limits in air — lower (%):</b>	Not Available
<b>Flammable limits in air — upper (%):</b>	Not Available

## Section 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available.
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Possibly hazardous reactions:</b>	None known.
<b>Conditions to avoid:</b>	Extreme temperatures, contact with incompatible materials.
<b>Incompatible Materials:</b>	Strong alkalis, oxidizing agents, chlorinated products (such as bleach).
<b>Hazardous decomposition products:</b>	None known.
<b>Polymerization:</b>	Will not occur.

## Section 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** This product is not classified as hazardous according to OSHA 1910.1200.

**Acute oral toxicity:** Product is expected to have low acute oral toxicity.

**Acute inhalation toxicity:** Product is expected to have low acute inhalation toxicity.

**Acute dermal toxicity:** Product is expected to have low acute dermal toxicity.

**Skin irritation:** May cause mild skin irritation.

**Eye irritation:** Causes moderate to severe eye irritation.

**Sensitization:** No sensitizing effects known.

**Carcinogenic categories:** None of the components of this product are listed as carcinogens by AGCIH, IARC, NTP or OSHA.

## Section 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** None  
**Persistence:** None  
**Degradability:** None

## Section 13. DISPOSAL CONSIDERATIONS

**Cleanup considerations:** Unused product can be disposed of down sanitary sewers with water. Used solution may be hazardous as a result of the pre-existing contaminants present in the equipment being cleaned. Dispose of material in accordance with the local, State, Provincial, and Federal regulations for your location.

**Contaminated packaging:** Rinse with water and offer for recycling, if available in your area. Otherwise, dispose as non-hazardous waste.

## Section 14. TRANSPORT INFORMATION

D.O.T. (U.S.): Not Regulated

## Section 15. REGULATORY INFORMATION

### U.S. Federal Regulations

**OSHA Hazard Communication Standard:** This material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

**OSHA Process Safety Management Standard:** Components of this product are not regulated under OSHA PSM Standard 29 CFR 1910.119.

**TSCA Status:** All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory.

**SARA Section 311/312 Hazard Categories:** Not classified as hazardous.

**SARA 313 Information:** Not listed.

**Comprehensive Response Compensation and Liability Act (CERCLA):** Not reportable.

**Clean Air Act (CAA):** This product does not contain any chemicals that are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

**Clean Water Act (CWA):** None of the chemicals in this product are listed as Hazardous Substances, Priority Pollutants or Toxic Pollutants under the CWA.

### U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains no chemical(s) known to the state of California to cause cancer or other reproductive harm.

## Canada

**WHMIS Hazard Symbol and Classification:** Not applicable/Not classified as hazardous  
**Canadian Ingredient Disclosure List (IDL):** None of the components in this product are listed on the IDL.

**Canadian National Pollutant Release Inventory (NPRI):** None of the components in this product are listed on the NPRI.

### Section 16. OTHER INFORMATION

Please use FLOW-AIDE only as directed. If procedures are not published for your particular application, please call for assistance. FLOW-AIDE is designed to be diluted with water and water only. Use FLOW-AIDE at an ambient temperature, do not heat.

Vent circulating solution to atmosphere. Some adverse reactions may occur with some alloys of aluminum, magnesium, zinc and/or other sacrificial metallurgies.

**CAUTION:** FLOW-AIDE is non-corrosive, but the application of FLOW-AIDE may expose preexisting corrosion under scale (pitting, holes or similar damage) that can result in leaks in pipes, equipment or systems.

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