



# MATERIAL SAFETY DATA SHEET

01/01/11

## SECTION I - PRODUCT AND COMPANY IDENTIFICATION

**Manufacturer:** Stellar Solutions, Inc.  
4511 Prime Parkway  
McHenry, IL 60050  
(847) 854-2800

**EMERGENCY TELEPHONE:** (847) 854-2800  
8 AM - 5 PM Central Time

Trade Name: CitriSurf 8310  
Identification Number: STS-8310  
Product Use/Class: Specialty Cleaner

## SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Item</u>	<u>Chemical Name</u>	<u>CAS NO.</u>	<u>% By Wt.</u> <u>less than</u>
01	Citric Acid	77-92-9	15%
02	Phosphoric Acid	7664-38-2	20%
Non-hazardous Ingredients			Balance

Citric Acid is "Generally Recognized as Safe" (GRAS) as a general food additive per 21 CFR 184.1033  
Non hazardous ingredients in this product are considered non hazardous under the Federal Hazard Communication Standard 29 CFR 1910. 1200. All ingredients are on the U.S. TSCA Inventory.

### Exposure Limits:

<u>Item</u>	<u>TLV-TWA</u>	<u>TLV-STEL</u>	<u>PEL-TWA</u>	<u>PEL-CEILING</u>	<u>SKIN</u>
01	N.E.	N.E.	N.E.	N.E.	NO
02	1mg/m <sup>3</sup>	3mg/m <sup>3</sup>	1mg/m <sup>3</sup>	N.E.	NO

(See Section 16 for abbreviation legend)

## SECTION III - HAZARDS IDENTIFICATION

\*\*\***EMERGENCY OVERVIEW**\*\*\*: DANGER! CORROSIVE. Causes severe irritation and burns to every area of contact. Harmful if swallowed or inhaled.

**Effects of Overexposure - Eye Contact:** May cause irreversible eye injury. Contact with liquid is corrosive to the eyes and causes severe burns.

**Effects of Overexposure - Skin Contact:** Corrosive. May cause redness, pain, and severe skin burns.

**Effects of Overexposure - Inhalation:** Inhalation is not an expected hazard unless misted or heated to high temperatures. Prolonged mist or vapor inhalation may cause irritation to the nose, throat, and upper respiratory tract. Severe exposures can lead to a chemical pneumonitis.

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### SECTION III - HAZARDS IDENTIFICATION (continued)

**Effects of Overexposure - Ingestion:** Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause hemorrhaging of the digestive tract. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract.

**Effects of Overexposure - Chronic Hazards:** Prolonged inhalation may cause respiratory tract inflammation and lung damage. Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis.

**Primary Routes of Entry:** Skin contact, skin absorption, inhalation, ingestion, eye contact

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### SECTION IV - FIRST AID MEASURES

**First Aid - Eye Contact:** Remove contact lenses. IMMEDIATELY FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**First Aid - Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention immediately.

**First Aid - Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

**First Aid - Ingestion:** If swallowed, do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

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### SECTION V - FIRE AND EXPLOSION INFORMATION

**Flash Point:** N.A. - Aqueous solution

**Flammable Limits:** LEL: N.A. UEL: N.A.

**Extinguishing Media:** None required - Aqueous solution. Alcohol, foam, CO<sub>2</sub>, dry chemical, water fog may be used.

**Special Fire Fighting Procedures:** If storage containers are involved in fire, keep cool with water spray to prevent pressure build-up. As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

**Unusual Fire and Explosion Hazard:** None known. "Empty" containers retain some product residue (liquid and/or water vapor) and can be dangerous when pressurized. Bursting of containers can occur at elevated temperatures. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

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### SECTION VI - ACCIDENTAL RELEASE MEASURES

**Steps to be taken in case material is released or spilled:** Neutralize with alkaline material (soda ash, lime), then absorb spill with inert material (e.g. dry sand or earth) then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Follow all government regulations.

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**SECTION VII - HANDLING AND STORAGE**

**Handling:** Wash thoroughly after handling. Do not get into eyes, on skin or on clothing.

**Storage:** Keep container closed when not in use. Store in corrosion resistant containers. Store away from incompatible materials. Aqueous solutions of acid can, if in contact with reactive metals (iron, zinc, aluminum), over a period of time form hydrogen - an extremely flammable gas. Store under a controlled environment. Avoid excessive heat. Keep from freezing.

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**SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering Controls:** Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Respiratory Protection:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace condition warrant a respirator's use.

**Skin Protection:** Rubber, neoprene or polyvinyl chloride impervious gloves may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Consult your glove manufacturer for compatibilities.

**Eye Protection:** Wear chemical splash goggles. DO NOT WEAR CONTACT LENSES.

**Other Protective Equipment:** Wear suitable protective clothing to minimize and/or prevent contact. An eye-wash and safety shower should be present in the immediate area when handling this product.

**Hygienic Practices:** Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only in well ventilated area. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues. Avoid contact with eyes, skin and clothing.

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**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	>212 °F	<b>Melting/Freezing Point:</b>	N.D.
<b>Odor:</b>	N.D.	<b>Appearance:</b>	Opaque, white gel/paste
<b>Specific Gravity:</b>	1.1	<b>Solubility in Water:</b>	Complete
<b>Vapor Density:</b>	Heavier than air	<b>Vapor Pressure:</b>	N.D.
<b>Physical State:</b>	Heavy liquid	<b>Odor Threshold:</b>	N.D.
<b>Evaporation Rate:</b>	<1 (Butyl Acetate = 1)	<b>pH @ 100 %:</b>	~2
<b>Viscosity:</b>	N.D.	<b>Coeff. of Water/Oil Dist.:</b>	N.D.

(See Section 16 for abbreviation legend)

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**SECTION X - STABILITY AND REACTIVITY**

**Stability:** This product is stable under normal storage conditions.

**Conditions to Avoid:** N.A.

**Incompatibility:** Strong bases, alkali metals, oxides of sulfur, strong oxidizers, strong reducing agents, caustic materials.

**Hazardous Decomposition or Byproducts:** Carbon dioxide, carbon monoxide, phosphorus oxides may form when heated to decomposition

**Hazardous Polymerization:** Will not occur under normal conditions.

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**SECTION XI - TOXICOLOGICAL PROPERTIES**

**Threshold Limit Value:** LD 50 (ORAL-RAT) 1530 mg/kg  
LD 50 (SKIN-RABBIT) 2740 mg/kg

**Carcinogenicity:** NTP: N.A. IARC Monographs: N.A. OSHA Regulated: N.A.

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**SECTION XII - ECOLOGICAL PROPERTIES**

**Ecological Information:** No information.

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**SECTION XIII - DISPOSAL CONSIDERATIONS**

**Disposal Method:** Follow all federal, state and local regulations.

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**SECTION XIV - TRANSPORTATION INFORMATION**

**DOT Proper Shipping Name:** Corrosive liquid, Acidic, Inorganic, NOS, Phosphoric acid

**DOT Hazard Class:** 8, UN3264, PG III, ERG#154, NMFC 70

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**SECTION XV - REGULATORY INFORMATION****U. S. Federal Regulations as Follows:**

**OSHA:** Hazardous by definition of Hazard Communication Standard ( 29 CFR 1910.1200)

**CERCLA - SARA Hazard Category:** This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard

**SECTION XV - REGULATORY INFORMATION (continued)**

**SARA Section 313:** This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

**Acute:** Yes    **Chronic:** No    **Fire:** No    **Pressure:** No    **Reactivity:** No    (Pure / Liquid)

**Toxic Substances Control Act (TSCA):** The chemical substances in this product are on the TSCA Section 8 Inventory.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No information is available.

**Canada Regulations as Follows:**

**WHMIS:** The Canadian Workplace Hazardous Materials Information System classification for this product is:

E - corrosive

Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

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**SECTION XVI - OTHER INFORMATION**

**NFPA Ratings:**      **Health:** 1      **Flammability:** 0      **Reactivity:** 0

**Date Prepared:** 09/26/2007

**Date Revised:** 01/01/2011

**Reason for Revision:** Update

**Previous Revision Date:** 01/08/2010

**Signature of Preparer:**



**Legend:**      N.A. - Not Applicable

N.E. - Not Established

N.D. - Not Determined

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While the company believes that the data contained herein is factual and the opinions expressed are based on tests and data believed to be reliable, it is the user's responsibility to determine the safety, toxicity and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by this company as to the effects of such use, the results to be obtained, or the safety and toxicity of the product, nor does this company assume any liability arising out of the use, by others, of the product referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or governmental regulations.