

**Product Name: Refresh**  
**Product ID#: 771**

## Section I MANUFACTURER'S INFORMATION

Manufacturer's Name And Address	Emergency Telephone Number:	509-545-9329
Northwest Agricultural Products	Number for Information:	509-545-9329
P.O. Box 3453	Date Revised:	January 4 <sup>th</sup> , 2010
821 S. Chestnut	Date Reviewed	April 8 <sup>th</sup> , 2013
Pasco, WA 99302-3453		

## Section II HAZARDOUS INGREDIENTS

MATERIAL COMPONENT	%	EXPOSURE LIMITS IN AIR	HAZARD DATA
		ACGIH TLV	OSHA PEL
Copper sulfate	1.5	1mg/m3	1mg/m3
(CAS No. 7758-99-8)			Health

\* Toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and re authorization Act of 1986 and 40 CFR Part 372.

(1) As Fe (2) As Mn (3) Ceiling

## Section III PHYSICAL DATA

Boiling Point , 760 MM HG	- 100 °	Melting Point	-	N/A
Specific Gravity (H <sub>2</sub> O=1)	- 1.22	Vapor Pressure	-	Not known
Vapor Density (AIR=1)	- Not known	Solubility in H <sub>2</sub> O, % by wt.	-	Approx. 98%
% Volatile by and Odor	- Not known	Evaporation Rate ( Butyl Acetate=1)	-	-Not known
Appearance and Odor	- Dark Brown Liquid, Sweet	pH	-	2.36

## Section IV FIRE AND EXPLOSION DATA

Flash Point	Auto Ignition		
(Test Method)	N/A	Temperature	N/A
Flammable limits in Air, % by vol.:	Lower N/A	Upper	N/A
Extinguishing Media	N/A		
Special Fire	N/A		
Fighting Procedures	N/A		
Unusual Fire and Explosion Hazard	N/A		

## Section V HEALTH AND HAZARD INFORMATION

### SYMPTOMS OF OVEREXPOSURE

**INHALATION:** May cause respiratory tract irritation, nausea, vomiting , weakness, fever, chills and loss of appetite. Chronic exposure may cause pneumonia, liver damage, and neuralgic damage.

**SKIN CONTACT:** May cause skin irritation.

**SKIN ABSORPTION:** None Known .

**EYE CONTACT:** May cause eye irritation .

**INGESTION:** Ingestion may result in nausea, vomiting, diarrhea, blood in vomits and stools, burning pain in mouth and throat, abdominal pain, lethargy, confusion , edema, leukocytosis, hyperglycemia, acidosis, shock, liver and kidney damage, and other gastrointestinal and neuralgic symptoms and damage. Ingestion by a child of more than 60 ml. ( 2 ounces ) or by an adult of more than 150 ml. ( 5 ounces ) may be fatal.

### EMERGENCY AND FIRST AID PROCEDURES

**EYES:** Immediately flush with water for 15 minutes, lifting eyelids to flush thoroughly.

**SKIN :** Wash thoroughly with water.

**INHALATION :** Remove to fresh air. If breathing is difficult, contact a physician.

**INGESTION:** Drink large quantities of water or milk. Follow with milk of magnesia, beaten eggs or vegetable oil. Do not induce vomiting. Contact a physician.

### SUSPECTED CANCER AGENT?

☒ **NO:** This product's ingredients are not found in the list below.

☐ **YES:** ☐ Federal OSHA ☐ NTP ☐ IARC ☐ Cal/ OSHA

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Hemochromatosis.

**NOTES TO A PHYSICIAN:** Ingestion of more than 0.5 ml of product per kg body weight may result in iron toxicity.

**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,** LIQUID, N.O.S. (CUPRIC SULFATE), 9, UN 3082, PG 111, RQ 10 LBS.  
 (ID NUMBER REQUIRED) ERG #171  
 (FERTILIZING COMPOUNDS (MANUFACTURED), LIQUID)  
 NMFC ITEM 68140 SUB 6, LTL CLASS 70)

STABILITY	X	Stable	Unstable
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HAZARDOUS DECOMPOSITION/COMBUSTION PRODUCTS: Oxides of sulfur and zinc.

## Section VII SPILL, LEAK AND DISPOSAL PROCEDURES

**NEUTRALIZING CHEMICALS:** Baking soda ( sodium bicarbonate ) , soda , ash or lime.

## Section VIII EQUIPMENT

Use general or local exhaust ventilation to meet TLV requirements.

**RESPIRATORY:** None required where appropriate ventilation conditions exist. If the TLV is exceeded, a self-contained breathing apparatus is advised.

EYE: Safety goggles.

**GLOVES:** Acid- resistant gloves such as rubber or neoprene.

**OTHER CLOTHING AND EQUIPMENT:** Coats, coveralls or aprons are recommended.

Special Notes: This product is not regulated under national or international transport regulations.

**PRECAUTIONARY STATEMENTS:**

Avoid contact with skin, eyes or clothing. Do not ingest. Avoid inhalation of mists.

**OTHER HANDLING AND STORAGE REQUIREMENTS:**

Keep lid tightly closed. Store in a dry area, above freezing and below 105° F, out of direct sunlight and way from strong alkalis. Keep out of reach of children.

Prepared By: David W. Bergevin

Date: January 4, 2010

All information, recommendations and suggestions appearing herein concerning our products are based upon tests and data believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity and suitability for his/her own use of the product described herein. Since the actual use by others is beyond our control, we make no guarantee, expressed or implied, as to the effects of such use, the results to be obtained, or the safety and toxicity of the product; nor do we assume any liability arising out of use, by others, of the product referred to herein. The information herein is not 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 government regulations.