



NFPA HAZARD RATING				U.S. TRANSPORT SUMMARY	
0	Least				See Section 14 for full information.
1	Slight	2	Health		
2	Moderate	0	Flammability		
3	High	0	Reactivity		
4	Severe				

SECTION 1: IDENTIFICATION	
<b>Product Name:</b> Gravity L PRO-Cu <b>EPA Registration #:</b> Exempt <b>Product ID/Unity #:</b> 10000545 <b>Common Name:</b> Copper sulfate <b>Chemical Description:</b> Liquid copper sulfate fertilizer <b>Recommended Uses:</b> Fertilizer product – See product label for full directions for use <b>Restrictions for Use:</b> See product label for any potential restrictions on use.	<b>MEDICAL EMERGENCY TELEPHONE NUMBER:</b> 1-877-424-7452 (24hrs)  <b>Non-Emergency Business Inquiries:</b> 1-855-494-6343 Mon – Fri 8am – 5pm (Central Standard Time)
<b>Manufactured For:</b> <b>WINFIELD SOLUTIONS, LLC</b> P. O. Box 64589 St. Paul, MN 55164-0589	
<b>FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL:</b> <b>CHEMTREC 1-800-424-9300 (24 hours)</b>	

SECTION 2: HAZARDS IDENTIFICATION	
<b>EMERGENCY OVERVIEW:</b> Blue liquid with a slight odor. Causes serious eye and skin damage. Harmful if swallowed.	
<b>POTENTIAL HEALTH EFFECTS:</b> <b>Eyes:</b> Causes serious eye irritation with the potential for irreversible damage. <b>Skin:</b> Causes serious skin irritation with the potential for irreversible damage. <b>Inhalation:</b> Inhalation of mist may cause irritation of the upper respiratory tract. <b>Ingestion:</b> Harmful if swallowed. May cause burning of the esophagus. <b>Preexisting Conditions:</b> Preexisting respiratory conditions may be aggravated by exposure to mists. <b>Chronic Health Effects:</b> Prolonged inhalation may be harmful.	
<b>Carcinogenicity</b>	NTP: Not listed                      IARC: Not listed                      OSHA: Not listed
<b>OSHA HCS 2012 CLASSIFICATION:</b> Skin Corrosion/Irritation Category 1; Eye Damage/Irritation Category 1; Acute Oral Toxicity Category 4	
<b>SIGNAL WORD:</b> DANGER	
<b>HAZARD STATEMENTS:</b> Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage.	
<b>Percent of product with unknown toxicity:</b> 6.9%	
<b>PRECAUTIONARY STATEMENTS:</b> <b>Prevention:</b> Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe mist. Wear protective gloves, protective clothing, eye protection, and face protection. See Section 8 for additional information.	

*Continued on next page*

<b>Response:</b>	<b>If swallowed:</b> Rinse mouth. Do NOT induce vomiting. Immediately call a poison control center (1-877-424-7452) or doctor for treatment advice. <b>If on skin (or hair):</b> Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re-use. <b>If inhaled:</b> Remove person to fresh air and keep comfortable for breathing. Immediately call a poison control center (1-877-424-7452) or doctor for treatment advice. <b>If in eyes:</b> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison control center (1-877-424-7452) or doctor for treatment advice.
<b>Storage:</b>	Store locked up.
<b>Disposal:</b>	Dispose of contents/container in accordance with Federal, state and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS		
Ingredient	% (wt)	CAS Reg. #
Copper sulfate pentahydrate	21.2%	7758-99-8
*Ingredients not specifically listed are non-hazardous and are considered to be confidential business information under 29 CFR 1910.1200(i).		
See Section 8 for exposure limits.		

SECTION 4: FIRST AID MEASURES	
<b>Inhalation:</b>	Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
<b>Ingestion:</b>	Seek medical attention or call a poison control center immediately for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>Eyes:</b>	Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention immediately.
<b>Skin:</b>	Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention immediately.

SECTION 5: FIRE FIGHTING MEASURES
<b>Suitable Extinguishing Media:</b> Water spray or fog, alcohol-resistant foam, carbon dioxide, or dry chemical
<b>Unsuitable Extinguishing Media:</b> Water jet; Use water jet only to cool containers.
<b>Special Fire Fighting Procedures:</b> Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.
<b>Hazardous Combustion Products:</b> Carbon oxides and Sulfur oxides; Airborne copper may also be present (harmful to respiratory system.)
<b>Unusual Fire and Explosion Hazards:</b> No unusual fire or explosion hazards.

SECTION 6: ACCIDENTAL RELEASE MEASURES
<b>Personal Precautions:</b> Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.
<b>Environmental Precautions:</b> Do not allow spilled product to enter sewers or waterways.
<b>Methods for Containment:</b> Contain spilled product by diking area with sand or earth.
<b>Methods for Clean-up:</b> Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop, or sweep up material and place in a container for disposal. Do not place spilled material back in original container.
<b>Other Information:</b> Spills of this product may require reporting under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as the product contains Copper sulfate with a reportable quantity (RQ) of 10 lbs. See Section 15 for additional information.

## SECTION 7: HANDLING AND STORAGE

**Handling:** Ensure adequate ventilation during handling and use. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. Do not empty into drains.

**Storage:** Store in cool, dry areas away from children, food and feed products in an area away from incompatible substances. Ensure that storage area is secured. Protect packaging from physical damage. Protect from exposure to fire.

**Minimum Storage Temperature:** Not determined

**Other Precautions:** Consult Federal, state and local laws and regulations pertaining to storage.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## Exposure Guidelines

Component:	OSHA PEL	ACGIH TLV	NIOSH REL
Copper sulfate (copper dusts and mists)	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA

**Respiratory Protection:** For most well-ventilated conditions, no respiratory protection should be needed. If airborne concentrations exceed exposure limits, use a NIOSH approved air-purifying respirator with cartridges/canisters approved for general particulates.

**Engineering Controls:** **Local Exhaust:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

**Protective Gloves:** This product can cause serious skin damage. Wear chemically protective gloves to prevent exposure to skin.

**Eye Protection:** To avoid contact with eyes, wear chemical safety goggles or safety glasses and full face shield. Contact lenses are not protective eye devices. An emergency eyewash or water supply should be readily accessible to the work area

**Other Protective Clothing or Equipment:** Wear long-sleeve shirt, long pants and chemically protective boots plus socks to prevent skin contact.

**Work/Hygienic Practices:** Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid	<b>Specific Gravity (H<sub>2</sub>O=1):</b>	1.14-1.16 (typical)
<b>Vapor Pressure (mm Hg):</b>	Not determined	<b>Density (lbs/gallon):</b>	9.5 – 9.7 (typical)
<b>Vapor Density (Air=1):</b>	Not determined	<b>Melting Point/Freezing Point:</b>	32°F (estimated)
<b>Solubility in Water (wt %):</b>	100%	<b>Boiling Point/Range:</b>	302°F (estimated)
<b>Viscosity:</b>	Not determined	<b>pH:</b>	1.8
<b>Appearance and odor:</b>	Blue liquid with slight odor.	<b>Flash Point:</b>	Not available

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Reacts violently with strong alkaline substances. This product may react with reducing agents.

**Chemical Stability:** Product is stable at ambient temperature and pressure, under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur.

**Conditions to Avoid:** Contact with incompatible materials.

**Incompatible Materials:** Bases and reducing agents.

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

## SECTION 11: TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY**

<b>Eye Effects:</b>	Causes serious and irreversible eye damage.
<b>Skin Effects:</b>	Cause serious and irreversible skin damage.
<b>Acute Inhalation Effects:</b>	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
<b>Acute Oral Effects:</b>	Estimated LD50 = 1,333 mg/kg; May cause burning of the esophagus due to low pH of concentrate.
<b>Specific Target Organ Toxicity:</b>	None known

**CHRONIC TOXICITY**

<b>Chronic Effects:</b>	Prolonged inhalation may be harmful.
<b>Carcinogenicity:</b>	No component is anticipated to have carcinogenic effects.
<b>Mutagenicity:</b>	No component is anticipated to have mutagenic effects.
<b>Teratogenicity:</b>	No component is anticipated to have teratogenic effects.
<b>Reproductive Toxicity:</b>	No component is anticipated to have effects on the reproductive system.

**POTENTIAL HEALTH EFFECTS:**

**Eyes:** Causes serious eye irritation with the potential for irreversible damage.  
**Skin:** Causes serious skin irritation with the potential for irreversible damage.  
**Inhalation:** Inhalation of mist may cause irritation of the upper respiratory tract.  
**Ingestion:** Harmful if swallowed. May cause burning of the esophagus.

## SECTION 12: ECOLOGICAL INFORMATION

**ENVIRONMENTAL SUMMARY:** Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected. Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

**ECOTOXICITY DATA:**

<b>Fish Acute and Prolonged Toxicity:</b>	Estimated 96 hr LC50 = 3.2 mg/L
<b>Aquatic Invertebrate Acute Toxicity:</b>	Estimated 48 hr EC50 = 38.4 mg/L ( <i>Daphnia</i> )
<b>Aquatic Plant Toxicity:</b>	Not determined
<b>Bird Acute and Prolonged Toxicity:</b>	Not determined
<b>Honeybee Toxicity:</b>	Not determined

**ENVIRONMENTAL EFFECTS:**

<b>Soil Absorption/Mobility:</b>	Not determined
<b>Persistence and degradability:</b>	Not determined
<b>Bioaccumulative Potential:</b>	Not determined
<b>Other adverse effects:</b>	Not determined

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste:** Dispose of in accordance with applicable Federal, state and local laws and regulations.  
**Container:** Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations.  
**RCRA Characteristics:** It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste. If disposed of as purchased, waste code D002 (Corrosive) applies.

## SECTION 14: TRANSPORT INFORMATION

<b>DOT:</b> (Ground)	UN3264, Corrosive liquid, acidic, inorganic, n.o.s., 8, PG I, Marine Pollutant
<b>IMDG:</b> (Sea)	Not determined
<b>IATA:</b> (Air)	Not determined
<b>TDG:</b> (Canada)	Not determined

SECTION 15: REGULATORY INFORMATION								
<p><b>TSCA Inventory:</b> All components are listed on the TSCA inventory.</p> <p><b>SARA Title III Information:</b></p> <p>Section 302 - Extremely hazardous substances: None listed</p> <p>Section 311/312 – Hazard Categories: Immediate (Acute)</p> <p>Section 313 – The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:</p> <p>Copper sulfate pentahydrate (CAS # 7758-99-8) 21.2%</p>								
<p><b>CERCLA -</b> This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):</p> <p>Copper sulfate (CAS # 7758-98-7) has an RQ of 10 lbs which is reached with 5 gallons of product.</p>								
<p><b>California Proposition 65:</b> This product does not contain any chemicals known to the state of California to cause cancer and/or reproductive harm.</p>								
<p><b>U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):</b></p> <table border="0"> <thead> <tr> <th style="text-align: left;">Chemical Name</th> <th style="text-align: left;">CAS #</th> <th style="text-align: left;">State(s)</th> </tr> </thead> <tbody> <tr> <td>Copper sulfate pentahydrate</td> <td>7758-99-8</td> <td>MA, NJ, PA, RI</td> </tr> </tbody> </table>			Chemical Name	CAS #	State(s)	Copper sulfate pentahydrate	7758-99-8	MA, NJ, PA, RI
Chemical Name	CAS #	State(s)						
Copper sulfate pentahydrate	7758-99-8	MA, NJ, PA, RI						
<p><b>Canadian Domestic Substances List:</b> Not determined</p>								
<p><b>WHMIS Classification:</b> This product is not approved for use in Canada. WHMIS classification is not determined.</p>								

SECTION 16: OTHER	
<p><b>Disclaimer:</b> The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions' knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.</p>	
<p><b>Revision Date:</b> January 21, 2020</p> <p><b>Sections Revised:</b> N/A – New document</p>	<p><b>Supersedes document dated:</b> N/A – New document</p>