

SAFETY DATA SHEET



WILBUR-ELLIS.

1. Identification

Product identifier Link® Minors TNZ
Other means of identification None.
Recommended use Ag Product - Plant Nutrition
Recommended restrictions None Known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Wilbur-Ellis Company LLC
Address Wilbur-Ellis Company LLC
16300 Christensen Rd Ste 135
Telephone Tukwila, WA 98188 United States
E-mail SDS@WilburEllis.com
Emergency phone number Branded Products Information (800) 500-1698

2. Hazard(s) identification

Hazard(s) Chemtrec - Domestic (800) 424-9300
Chemtrec - International +1 703-741-5970
Physical hazards Not classified.
Health hazards None
Environmental hazards Not classified.
OSHA defined hazards Not classified.
Label elements None
Signal word None
Hazard statement None
Precautionary statements None

Prevention Wash Thoroughly after handling. Wear protective gloves. Wear eye protection.
Response Wash hands after handling.
Storage Store away from incompatible materials.
Disposal Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Copper Sulfate Pentahydrate		7758-99-8	0.4 - <0.6
Manganese Sulfate Monohydrate		7785-87-7	0.1 - <0.2
Other components below reportable levels			99 - < 99

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
Ingestion Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed Mists may irritate the respiratory tract, skin and eyes.
Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Large Spills: dike the spilled material for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. Environmental Never return spills to original containers for re-use.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage. Avoid prolonged exposure.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s)
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates controls should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Liquid
Form	Liquid
Color	Blue
Odor	Not available.
Odor threshold	Not available.
pH	5.5 - 7.5
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	
Solubility(ies)	Not available.
Solubility (water)	Miscible

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Pounds per gallon	9.88
Specific Gravity	1.18

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful
Skin contact	May cause skin irritation.
Eye contact	Causes eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	May cause eye irritation. Symptoms may include, stinging, redness and blurred vision. May cause discomfort.

Information on toxicological effects Acute toxicity

Components	Species	Test Results
Copper Sulfate (CAS 7758-99-8)		
Acute		
Oral		
LD50	Rat	300 mg/kg (estimated)

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
IARC Monographs. Overall Evaluation of Carcinogenicity	Not listed.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not regulated.
US. National Toxicology Program (NTP) Report on Carcinogens	Not listed.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity- repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.
12. Ecological information	
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. Disposal considerations	
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/containers in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
14. Transport information	
DOT	Containers in excess of 253 gallons capacity must bear the UN Number label or a Class 9 Placard with UN Number 3082 displayed. Haz Mat Driver Endorsement is not required.
UN number	
UN Proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Copper Sulfate RQ = 253 gallons)
Transport Hazard Class(es)	
Class	9
Subsidiary risk	-
Label(s)	9

Packing Group III
Marine Pollutant No
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number UN3082
UN Proper shipping name Environmentally hazardous substances, liquid, n.o.s. (Copper Sulfate)
Transport Hazard Class(es)
Class 9
Subsidiary risk -
Packing Group III
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other Information
Passenger and cargo aircraft Allowed with restrictions
Cargo aircraft only Allowed with restrictions

IMDG

UN number UN3082
UN Proper shipping name Environmentally hazardous substances, liquid, n.o.s. (Copper sulfate)
Transport Hazard Class(es)
Class 9
Subsidiary risk -
Packing Group III
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established

15. Regulatory information

US federal regulations All components are listed on or exempted from the U.S. EPA TSCA Inventory List. This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4) Not listed.

SARA 304 Emergency release notification Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance Not listed.

SARA 311/312 Hazardous Chemical No

SARA 313 (TRI reporting)

Components	CAS number	% by wt.
Zinc Compounds	7446-19-7	0.1 - <0.3
Manganese Compounds	10034-96-5	0.1 - <0.3
Copper Compounds	7758-99-8	0.3 - <0.5

Other federal regulations

**Clean Air Act (CAA) Section 112
Hazardous Air Pollutants (HAPs) List** Not regulated.

**Clean Air Act (CAA) Section 112(r)
Accidental Release Prevention (40 CFR
68.130)** Not regulated.

Safe Drinking Water Act (SWDA) Not regulated.

US state regulations

US. California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information, including date of preparation or last revision

Issue date 4/29/2020

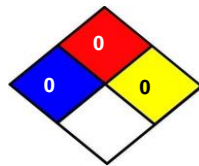
Version # 2

Health: 0

NFPA ratings Flammability: 0

Instability: 0

NFPA ratings



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