

SAFETY DATA SHEET



1. Identification

Product identifier Perfection Long Distance 25-0-12
Other means of identification None.
Recommended use Turf & Ornamental Product - Plant Nutrition
Recommended restrictions The ingredients used to produce this material contain crystalline silica in a form not-respirable or carcinogenic due to its manufacturing method and structure. Do not attempt to grind or mill this product.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Wilbur-Ellis Company LLC
Address 3300 S. Parker Rd Ste. 500
Aurora, CO 80014
United States
Telephone Branded Products (800) 500-1698
Information
E-mail SDS@wilburellis.com
Emergency phone number Chemtrec - Domestic (800) 424-9300
Chemtrec - International +1 703-741-5970

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Acute toxicity, inhalation Category 4
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements



Signal word Warning
Hazard statement Harmful if inhaled.
Precautionary statement
Prevention Avoid breathing dust. Use only outdoors or in a well-ventilated area.
Response If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
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	%
Urea		57-13-6	40 - < 50
Ammonium Sulfate		7783-20-2	10 - < 20
Potassium Chloride		7447-40-7	10 - < 20
Iron Sucrate		Not Available	3 - < 5
Calcium Carbonate		471-34-1	1 - < 3

Chemical name	Common name and synonyms	CAS number	%
Manganese Succinate		Not Available	1 - < 3
Zinc Sulfate Monohydrate		7733-02-0	< 0.2
Copper Sulfate Pentahydrate		7758-98-7	< 0.1
Other components below reportable levels			3 - < 5

Composition comments Occupational Exposure Limits for impurities, if present, are listed in Section 8.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Rinse with 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	Dusts may irritate the respiratory tract, skin and eyes.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
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 (CO2).
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. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Minimize dust generation and accumulation. Avoid breathing dust. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in 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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium Carbonate (CAS 471-34-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Iron Sucrate	PEL	10 mg/m3	Fume.
Manganese Sucrate	Ceiling	5 mg/m3	

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Iron Sucrate	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Copper Sulfate Pentahydrate (CAS 7758-98-7)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
Iron Sucrate	TWA	5 mg/m3	Respirable fraction.
Manganese Sucrate	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium Carbonate (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Copper Sulfate Pentahydrate (CAS 7758-98-7)	TWA	1 mg/m3	Dust and mist.
		0.1 mg/m3	Fume.
Iron Sucrate	TWA	5 mg/m3	Dust and fume.
Manganese Sucrate	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
Urea (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates 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. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.

Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear suitable protective clothing.
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.
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	Granular Blend
Physical state	Solid.
Form	Solid Granules
Color	Various colored granules
Odor	None.
Odor threshold	Not available.
pH	Not available.
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	Not available.
Solubility(ies)	
Solubility (water)	75 %
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

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	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.

Hazardous decomposition products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics
Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity Harmful if inhaled.

Product	Species	Test Results
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Perfection Long Distance 25-0-12

Acute

Dermal

Solid

LD50	Rabbit	> 2000 mg/kg, 24 hours
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Oral

Solid

LD50	Rat	9000 mg/kg
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Components	Species	Test Results
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Ammonium Sulfate (CAS 7783-20-2)

Acute

Dermal

LD50	Mouse	> 2000 mg/kg
	Rat	> 2000 mg/kg

Oral

LD50	Mouse	> 2000 mg/kg
	Rat	4250 mg/kg

Calcium Carbonate (CAS 471-34-1)

Acute

Dermal

LD50	Rat	> 2000 mg/kg, 24 Hours
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Oral

LD50	Rat	> 2000 mg/kg
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Copper Sulfate Pentahydrate (CAS 7758-98-7)

Acute

Dermal

LD50	Rat	> 2000 mg/kg, 24 Hours
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Oral

LD50	Rat	482 mg/kg
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Iron Sucrate

Acute

Oral

LD50	Rat	> 10000 mg/kg
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Components	Species	Test Results
Manganese Sucrate		
<u>Acute</u>		
Inhalation		
<i>Dust</i>		
LC50	Rat	1 - 5 mg/l, 4 Hours
Oral		
LD50	Rat	> 2000 mg/kg
<i>Dust</i>		
LD50	Rat	301 - 1999 mg/kg
Potassium Chloride (CAS 7447-40-7)		
<u>Acute</u>		
Oral		
LD50	Rat	3020 mg/kg
Urea (CAS 57-13-6)		
<u>Acute</u>		
Oral		
LD50	Mouse	13000 mg/kg
	Rat	15000 mg/kg
Other		
LD50	Mouse	9200 mg/kg
	Rat	8200 mg/kg
Zinc Sulfate Monohydrate (CAS 7733-02-0)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Oral		
LD50	Mouse	1891 mg/kg
	Rat	2280 mg/kg
Other		
LD50	Mouse	316 mg/kg
	Rat	200 mg/kg
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	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Iron Sucrate (CAS Not Available)	3 Not classifiable as to carcinogenicity to humans.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not listed.		
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 any ingredients in the mixture.
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/container 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	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are listed on or exempted from the U.S. EPA TSCA Inventory List.	
Toxic Substances Control Act (TSCA)	All components of the mixture on the TSCA 8(b) inventory are designated "active".	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)		
Ammonium Sulfate (CAS 7783-20-2)	1.0 % One-Time Export Notification only.	
CERCLA Hazardous Substance List (40 CFR 302.4)		
Copper Sulfate Pentahydrate (CAS 7758-98-7)	Listed.	
Manganese Sulfate (CAS Not Available)	Listed.	
Zinc Sulfate Monohydrate (CAS 7733-02-0)	Listed.	
SARA 304 Emergency release notification	Not regulated.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)	Not listed.	
Superfund Amendments and Reauthorization Act of 1986 (SARA)		
SARA 302 Extremely hazardous substance	Not listed.	
SARA 311/312 Hazardous chemical	Yes	

Classified hazard categories

Acute toxicity (any route of exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
AMMONIA (INCLUDES ANHYDROUS AMMONIA AND AQUEOUS AMMONIA FROM WATER DISSOCIABLE AMMONIUM SALTS AND OTHER SOURCES; 10% OF TOTAL AQUEOUS AMMONIA IS REPORTABLE UNDER THIS LISTING)	7783-20-2	10 - < 20
MANGANESE COMPOUNDS	Not Available	1 - < 3

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Manganese Sucrate (CAS Not Available)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations**California Proposition 65**

WARNING: This product can expose you to cadmium, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Cadmium (CAS 7440-43-9)

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

Issue date 02-02-2021
Revision date 10-28-2021
Version # 02
NFPA ratings Health: 2
Flammability: 0
Instability: 0

NFPA ratings**Disclaimer**

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