SAFETY DATA SHEET



1. Identification

1. Identification			
Product identifier	Perfection Super Hierro 22-2-2		
Other means of identification	None.		
Recommended use	Turf & Ornamental Product - Plant Nutrition		
Recommended restrictions			
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	(900) 434 0300	
Emergency phone number	Chemtrec - Domestic Chemtrec - International	(800) 424-9300 +1 703-741-5970	
	Chemice international		
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Not classified.		
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	None.		
Hazard statement	The mixture does not meet the criteria for classification.		
Precautionary statement			
Prevention	Observe good industrial hygiene practices.		
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	Chemical name Common name and synonyms		%	
Ammonium Nitrate Sulfate ((nh4)3(no3)(so4))		12436-94-1	70 - < 80	
Ammonium Sulfate		7783-20-2	5 - < 10	
Ammonium Phosphate		7722-76-1	3 - < 5	
Iron Oxysulfate		Not Available	3 - < 5	
Potassium Sulfate		7778-80-5	3 - < 5	
Other components below repo	rtable levels		1 - < 3	
	Occupational Evenesure Limits for immunities	forecast are listed in Castier	. 0	

Composition comments

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

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	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	Direct contact with eyes may cause temporary irritation.
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 (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from	During fire, gases hazardous to health may be formed.

Special protective equipment Self-contained breathing apparatus and full protective clothing must be worn in case of fire. and precautions for firefighters

Use water spray to cool unopened containers.

Specific methodsUse standard firefighting procedures and consider the hazards of other involved materials.General fire hazardsNo unusual fire or explosion hazards noted.

6. Accidental release measures

the chemical

Fire fighting

equipment/instructions

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for	Stop the flow of material, if this is without risk. Following product recovery, flush area with water.
containment and cleaning up	For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. 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) Form Components Туре Value Iron Oxysulfate PEL 10 mg/m3 Fume. US. OSHA Table Z-3 (29 CFR 1910.1000) Components Value Form Туре Iron Oxysulfate TWA 5 mg/m3 Respirable fraction. 15 mg/m3 Total dust. 50 mppcf Total dust. 15 mppcf Respirable fraction. **US. ACGIH Threshold Limit Values** Form Components Value Туре Iron Oxysulfate TWA 5 mg/m3 Respirable fraction.

US. NIOSH: Pocket Guide to Components	o Chemical Hazards Type	Value	Form
Iron Oxysulfate	TWA	5 mg/m3	Dust and fume.
Biological limit values	No biological exposure limits noted for the ingredie	ent(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.		
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.		
Other	Wear suitable protective clothing.		
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.		
Thermal hazards	Wear appropriate thermal protective clothing, when	n necessary.	
General hygiene considerations	Always observe good personal hygiene measures, and before eating, drinking, and/or smoking. Rout equipment to remove contaminants.	, j	5

9. Physical and chemical properties

Appearance	Granular Blend
Physical state	Solid.
Form	Solid Granules
Color	Various colored granules
Odor	None.
Odor threshold	Not available.
рН	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 exp	losive 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)	90 %
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	Prolonged inhalation may be harmful.		
Skin contact	No adverse effects due to skin contact are expected.		
Eye contact	Direct contact with eyes may cause temporary irritation.		
Ingestion	Expected to be a low ingestion hazard.		
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.		

Information on toxicological effects

Acute toxicity	Not known.	
Product	Species	Test Results
Perfection Super Hierro 22	2-2-2	
Acute		
Dermal		
Solid		
LD50	Rabbit	> 2000 mg/kg, 24 hours
Oral		
Solid		
LD50	Rat	8800 mg/kg
Components	Species	Test Results
Ammonium Phosphate (C	AS 7722-76-1)	
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours
	Rat	> 5000 mg/kg, 24 Hours
Oral		
LD50	Rat	3260 mg/kg
Ammonium Sulfate (CAS	7783-20-2)	
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Oral		
LD50	Rat	4250 mg/kg
Iron Oxysulfate		
Acute		
Oral		
LD50	Rat	> 10000 mg/kg
		0.0

Components	Species	Test Results	
Potassium Sulfate (CAS 7778-80-	-5)		
Acute			
Dermal			
LD50	Rat	> 2000 mg/kg, 24 Hours	
Oral			
LD50	Rat	> 2000 mg/kg	
Skin corrosion/irritation	Prolonged skin contact r	nay cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes	may cause temporary irritation.	
Respiratory or skin sensitizatio	n		
Respiratory sensitization	Not a respiratory sensitiz	zer.	
Skin sensitization	This product is not expe	cted to cause skin sensitization.	
Germ cell mutagenicity	No data available to indi mutagenic or genotoxic.	cate product or any components present at greater than 0.1% are	
Carcinogenicity	Not classifiable as to car	cinogenicity to humans.	
IARC Monographs. Overall	Evaluation of Carcinoger	nicity	
Iron Oxysulfate (CAS No OSHA Specifically Regulate		3 Not classifiable as to carcinogenicity to humans. 310.1001-1053)	
Not listed. US. National Toxicology Pr	ogram (NTP) Report on C	arcinogens	
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.		
Further information	This product has no known adverse effect on human health.		
12. Ecological information	n		
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.	
Product	Species	Test Results	
Perfection Super Hierro 22-2	-2		
Aquatic			
Crustacea	EC50 Daphnia	634.0472 mg/l, 48 hours estimated	
Fish	LC50 Fish	6800.4009 mg/l, 96 hours estimated	
Persistence and degradability	No data is available on t	he degradability of any ingredients in the mixture.	
Bioaccumulative potential	No data available.		

Other adverse effectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation
potential, endocrine disruption, global warming potential) are expected from this component.

No data available.

13. Disposal considerations

Mobility in soil

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
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).

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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is not known to be 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)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

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)

Not 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 No chemical

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)		70 - < 80
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)		3 - < 5
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)		5 - < 10
Other federal regulations		
Clean Air Act (CAA) Section 112 Hazardous Air Pollu	itants (HAPs) List	
Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Releas Not regulated.	se Prevention (40 C	CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated. (SDWA)

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 Version # NFPA ratings

NFPA ratings

01-29-2021 01 Health: 1 Flammability: 0 Instability: 0



Disclaimer

Not available.