SAFETY DATA SHEET



1. Identification

Product identifier Other means of identification Recommended use Recommended restrictions	WIL-GRO® Extended Relief 2 None. Ag Product - Plant Nutrition None known.	26-3-5	
Manufacturer/Importer/Supplier			
Manufacturer			
Company name Address	Wilbur-Ellis Company LLC 16300 Christensen Rd. Ste 13 Tukwila, WA 98188	5	
Telephone E-mail	United States Branded Products Information SDS@wilburellis.com	(800) 500-1698	
Emergency phone number	Chemtrec - Domestic Chemtrec - International	(800) 424-9300 +1 703-741-5970	

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Serious eye damage/eye irritation	Category 2B
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Warning
Hazard statement	Causes eye irritation. May cause respiratory irritation.
Precautionary statement	
Prevention	Avoid breathing dust. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
Response	If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
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	30 - < 40
Ammonium Sulfate		7783-20-2	5 - < 10
Manganese Oxide		1344-43-0	5 - < 10

Chemical name	Common name and synonyms	CAS number	%
Manganese Sulfate		7785-87-7	5 - < 10
Monoammonium Phosphate		7722-76-1	5 - < 10
Potassium Chloride		7447-40-7	5 - < 10
Other components below reportable levels			30 - < 40

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

4. First-aid measures	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. 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 under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). 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 meas	sures
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. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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	Stop the flow of material, if this is without risk. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Absorb in vermiculite, dry sand or earth and place into containers.
	Large Spills: Wet down with water and dike for later disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. Avoid the generation of dusts during clean-up. Shovel the material into waste container. 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.

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

Conditions for safe storage, including any incompatibilities

Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid prolonged exposure. Store locked up. 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

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

Components	Type	Value	
Manganese Oxide (CAS 1344-43-0)	Ceiling	5 mg/m3	
Manganese Sulfate (CAS 7785-87-7)	Ceiling	5 mg/m3	
US. ACGIH Threshold Limit Components	t Values Type	Value	Form
Manganese Oxide (CAS 1344-43-0)	TWA	0.1 mg/m3	Inhalable fraction.
Manganese Sulfate (CAS 7785-87-7)	TWA	0.02 mg/m3 0.1 mg/m3	Respirable fraction. Inhalable fraction.
	.	0.02 mg/m3	Respirable fraction.
US. NIOSH: Pocket Guide to Components	o Chemical Hazards Type	Value	Form
Manganese Oxide (CAS 1344-43-0)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.
Manganese Sulfate (CAS 7785-87-7)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.
US. Workplace Environmer Components	ntal Exposure Level (WEEL) Guides Type	Value	Form
Urea (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.
ological limit values	No biological exposure limits noted for the	ingredient(s).	
ppropriate engineering ntrols	Good general ventilation (typically 10 air changes per hour) 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. I 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 th 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. Provide eyewash station		
-	, such as personal protective equipment		
Eye/face protection	Chemical respirator with organic vapor car	tridge, full facepiece, dus	t and mist filter.
Skin protection Hand protection	Wear appropriate chemical resistant glove supplier.	es. Suitable gloves can be	recommended by the glove
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 clothi	ng, when necessary.	
eneral hygiene nsiderations	Always observe good personal hygiene me and before eating, drinking, and/or smokin equipment to remove contaminants.		

9. Physical and chemical properties

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Appearance	
Physical state	Solid.
Form	Powder.
Color	Not available.
Odor	Not available.
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)	Not available.
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.

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	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Dust may irritate respiratory system. Prolonged inhalation may be harmful.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Causes eye irritation. Dust may irritate the eyes.
Ingestion	Expected to be a low ingestion hazard.

Irritation of eyes. Dusts may irritate the respiratory tract, skin and eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Ammonium Sulfate (CAS 7783	-20-2)	
<u>Acute</u>		
Dermal		
LD50	Mouse	> 2000 mg/kg
	Rat	> 2000 mg/kg
Oral		
LD50	Mouse	> 2000 mg/kg
	Rat	4250 mg/kg
Manganese Oxide (CAS 1344-	43-0)	
<u>Acute</u>		
Inhalation		
Dust	D .	
LC50	Rat	1 - 5 mg/l, 4 Hours
Oral		
LD50	Rat	> 2000 mg/kg
Dust	Det	
LD50	Rat	301 - 1999 mg/kg
Manganese Sulfate (CAS 7785	5-87-7)	
<u>Acute</u> Oral		
LD50	Mouse	2330 mg/kg
LDOU	Rat	2150 mg/kg
Vanaammanium Dhaanhata (C		2150 mg/kg
Monoammonium Phosphate (C <u>Acute</u>	AS //22-76-1)	
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours
	Rat	> 5000 mg/kg, 24 Hours
Inhalation	hat	> 0000 Hig/kg, 24 Hours
LC50	Rat	> 5 mg/l, 4 Hours
Oral	hat	
LD50	Rat	3252 mg/kg
Potassium Chloride (CAS 7447		
Acute	10 7)	
Oral		
LD50	Rat	3020 mg/kg
Jrea (CAS 57-13-6)		
Acute		
Oral		
LD50	Mouse	13000 mg/kg
	Rat	15000 mg/kg
* Estimates for product ma	ay be based on additional component da	ata not shown.
Skin corrosion/irritation	Prolonged skin contact may cause	e temporary irritation.
Serious eye damage/eye	Causes eye irritation.	

irritation

Respiratory or skin sensitizatio	n
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
, , ,	ed Substances (29 CFR 1910.1001-1050)
Not regulated.	ogram (NTP) Report on Carcinogens
Not listed.	ogram (MTP) heport on Carcinogens
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

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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/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, if applicable, 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

15. Regulatory informatio	n				
US federal regulations	All components are listed on or exempted from the U.S. EPA TSCA Inventory List. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.				
TSCA Section 12(b) Export	Notification (40 CFR 7	07, Subpt. D)			
Not regulated.					
CERCLA Hazardous Substa	•	•			
Manganese Oxide (CAS 1344-43-0) Manganese Sulfate (CAS 7785-87-7) SARA 304 Emergency release notification		Listed. Listed.			
Not regulated.	ise notification				
OSHA Specifically Regulate	ed Substances (29 CFF	R 1910.1001-1050)			
Not regulated.					
Superfund Amendments and Re Hazard categories	authorization Act of 1 Immediate Hazard - Y Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - N	/es			
SARA 302 Extremely hazar	•				
Not listed.					
SARA 311/312 Hazardous chemical	No				
SARA 313 (TRI reporting)					
Chemical name		CAS number	% by wt.		
AMMONIA (INCLUDES A AQUEOUS AMMONIA F AMMONIUM SALTS ANI TOTAL AQUEOUS AMM UNDER THIS LISTING)	ROM WATER DISSOCI D OTHER SOURCES; 1	ABLE 0% OF	5 - < 10		
MANGANESE COMPOL		1344-43-0	5 - < 10		
MANGANESE COMPOUNDS7785-87-75 - < 10					
Other federal regulations					
Clean Air Act (CAA) Section	n 112 Hazardous Air Po	ollutants (HAPs) List			
Manganese Oxide (CAS Manganese Sulfate (CAS Clean Air Act (CAA) Section	S 7785-87-7)	ease Prevention (40 C	CFR 68.130)		
Not regulated.					
Safe Drinking Water Act (SDWA)	Not regulated.				
US state regulations					
US. California Proposition (California Safe Drinking any chemicals currently	Water and Toxic Enforce		pposition 65): This material is not known to contain		
16. Other information, inc	luding date of pre-	paration or last re	vision		
Issue date	02-17-2017				
Revision date	09-26-2017				
Version #					
version #	02				

Health: 2

Flammability: 0 Instability: 0

NFPA ratings



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