

Safety Data Sheet

GROWING SMARTE

Issue Date: 25-Sep-2020 Revision Date: 26-Sep-2020 Version 1

1. IDENTIFICATION

Product identifier

Product Name Furst-Class 12-8-4 + Mn

Other means of identification

SDS# FERT-050

Recommended use of the chemical and restrictions on use

Recommended Use Fertilizer.

Details of the supplier of the safety data sheet

Supplier Address

Fertizona Casa Grande LLC 2850 South Peart Rd Casa Grande, AZ 85193 www.fertizona.com

Ph: 520-836-7477

Emergency telephone number

Emergency Telephone INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Physical state Solid Odor Fertilizer-like

Classification

This SDS was created using the criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and is compliant with the Globally Harmonized System of Labeling and Classification of Chemicals (GHS).

Serious eye damage/eye irritation Category 2

Signal Word Warning

Hazard statements

Causes serious eye irritation



<u>Precautionary Statements - Prevention</u>

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Other hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Please also refer to subsequent sections of this SDS for additional information regarding the components of this product.

Chemical Nature

Please see products label for more info.

Chemical name	CAS No	Weight-%
Ammonium Sulfate	7783-20-2	40-50
Mono-ammonium Phosphate	7722-76-1	10-20
Calcium Sulfate	7778-18-9	10-20
Potassium Magnesium Sulfate	14977-37-8	5-10
Manganese Oxide	1344-43-0	1-5
Urea	57-13-6	1-5
Zinc sulfate	7446-19-7	1-5

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST AID MEASURES

Description of first aid measures

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact Wash with plenty of water. Take off contaminated clothing. Wash contaminated clothing

before reuse. If skin irritation persists, call a physician.

Inhalation Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center

if individual's condition declines or if symptoms persist.

Ingestion Rinse mouth. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything

by mouth to an unconscious person. Call a poison center or doctor/physician if you feel

unwell.

Most important symptoms and effects, both acute and delayed

Symptoms Causes serious eye irritation. May cause skin irritation. May be harmful if swallowed. May

be harmful in contact with skin. May cause nausea, vomiting, stomach ache, and diarrhea.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product is not flammable.

Hazardous combustion products Carbon oxides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate area

of leak or spill.

Environmental precautions

Environmental precautionsDo not allow into any sewer, on the ground or into any body of water. See Section 12 for

additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Avoid creating dust. Reclaim where possible. Sweep up and shovel into suitable containers

for disposal. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Avoid generation of dust. Wear eye/face protection. Wear protective gloves/protective

clothing. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8. Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dusts. Use only in well ventilated areas. Observe precautions

found on the label.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in original

container. Store at temperatures above 32°F.

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium Sulfate	TWA: 10 mg/m ³ inhalable	TWA: 15 mg/m ³ total dust	TWA: 10 mg/m ³ total dust
7778-18-9	particulate matter	TWA: 5 mg/m ³ respirable	TWA: 5 mg/m ³ respirable dust
		fraction	
		(vacated) TWA: 15 mg/m ³	
		(vacated) TWA: 5 mg/m ³	
		respirable fraction	
Manganese Oxide	TWA: 0.02 mg/m ³ Mn respirable	(vacated) Ceiling: 5 mg/m ³	IDLH: 500 mg/m ³ Mn
1344-43-0	particulate matter	Ceiling: 5 mg/m ³ Mn	TWA: 1 mg/m³ Mn
	TWA: 0.1 mg/m ³ Mn inhalable		STEL: 3 mg/m ³ Mn
	particulate matter		
Ferrous Sulfate	TWA: 1 mg/m ³ Fe	(vacated) TWA: 1 mg/m ³ Fe	TWA: 1 mg/m ³ Fe
7782-63-0			

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls Maintain eye wash fountain and quick-drench facilities in work area.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses as a minimum for protection. Refer to 29 CFR 1910.133 for eye and face

protection regulations.

Skin and Body ProtectionWear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate

skin and body protection.

Respiratory Protection If necessary, wear a MSHA/NIOSH-approved respirator. Refer to 29 CFR 1910.134 for

respiratory protection requirements.

General Hygiene Considerations Avoid contact with skin, eyes and clothing. After handling this product, wash hands before

eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before

reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid

AppearanceNot determinedOdorFertilizer-likeColorNot determinedOdor ThresholdNot determined

<u>Property</u> <u>Values</u> <u>Remarks</u> • <u>Method</u>

pH Not determined
Melting point / freezing point Not determined
Boiling point / boiling range Not determined
Flash point Not determined
Evaporation Rate Not determined
Flammability (Solid, Gas) Not determined

Flammability Limit in Air

Upper flammability or explosive Not determined

limits

Lower flammability or explosive Not determined

limits

Vapor Pressure Not determined

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Vapor Density	Not determined
Relative Density	Not determined
Water Solubility	Soluble in water
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children. Avoid generation of dust.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin Contact Prolonged contact may cause redness and irritation. May be harmful in contact with skin.

Inhalation May cause irritation if inhaled.

Ingestion May cause nausea, vomiting, stomach ache, and diarrhea. May be harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium Sulfate 7783-20-2	= 2840 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Mono-ammonium Phosphate 7722-76-1	= 5750 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
Calcium Sulfate 7778-18-9	> 3000 mg/kg (Rat)	-	-
Potassium Chloride 7447-40-7	= 2600 mg/kg (Rat)	-	-
Urea 57-13-6	= 8471 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or

potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document ...

 Oral LD50
 3,081.80
 mg/kg

 Dermal LD50
 3,267.53
 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ammonium Sulfate		250: 96 h Brachydanio rerio mg/L	14: 48 h Daphnia magna mg/L LC50
7783-20-2		LC50 32.2 - 41.9: 96 h	423: 24 h Daphnia magna mg/L
		Oncorhynchus mykiss mg/L LC50	EC50
		flow-through 18: 96 h Cyprinus	
		carpio mg/L LC50 123 - 128: 96 h	
		Poecilia reticulata mg/L LC50	
		semi-static 460 - 1000: 96 h	
		Leuciscus idus mg/L LC50 static	
		420: 96 h Brachydanio rerio mg/L	
		LC50 semi-static 480: 96 h	
		Brachydanio rerio mg/L LC50	
		flow-through 126: 96 h Poecilia	
		reticulata mg/L LC50 5.2 - 8.2: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		static 100: 96 h Pimephales	
		promelas mg/L LC50	
Mono-ammonium Phosphate		85.9: 96 h Oncorhynchus mykiss	
7722-76-1		mg/L LC50 static	
Calcium Sulfate		1970: 96 h Pimephales promelas	3200: 120 h Nitscheria linearis mg/L
7778-18-9		mg/L LC50 static 2980: 96 h	EC50
		Lepomis macrochirus mg/L LC50	
		static	
Potassium Chloride	2500: 72 h Desmodesmus	1060: 96 h Lepomis macrochirus	83: 48 h Daphnia magna mg/L
7447-40-7	subspicatus mg/L EC50	mg/L LC50 static 750 - 1020: 96 h	EC50 Static 825: 48 h Daphnia
		Pimephales promelas mg/L LC50	magna mg/L EC50
		static	
Urea		16200 - 18300: 96 h Poecilia	10000: 24 h Daphnia magna Straus
57-13-6		reticulata mg/L LC50	mg/L EC50 3910: 48 h Daphnia
			magna mg/L EC50 Static

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Ammonium Sulfate 7783-20-2	-5.1
Urea 57-13-6	-1.59

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of WastesDisposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Zinc sulfate	Toxic
7446-19-7	

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Not regulated

<u>IATA</u> Not regulated

<u>IMDG</u> Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Ammonium Sulfate	Х	ACTIVE	Х	Х	Х	X	X	Х	Х
Mono-ammonium Phosphate	X	ACTIVE	Х	X	Х	X	Х	X	Х
Calcium Sulfate	Χ	ACTIVE	X	X	Х	X	Χ	X	Х
Manganese Oxide	Χ	ACTIVE	X	X	Χ	X	Χ	X	X
Potassium Chloride	Χ	ACTIVE	X	X	Х	X	Χ	X	Х
Urea	Χ	ACTIVE	X	X	Χ	X	X	X	X
Zinc sulfate	Х		X			Х		X	Х
Ferrous Sulfate	Х				Х	Х		Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

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AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ferrous Sulfate	1000 lb		RQ 1000 lb final RQ
7782-63-0			RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ammonium Sulfate - 7783-20-2	7783-20-2	40-50	1.0
Mono-ammonium Phosphate - 7722-76-1	7722-76-1	10-20	1.0
Manganese Oxide - 1344-43-0	1344-43-0	1-5	1.0
Zinc sulfate - 7446-19-7	7446-19-7	1-5	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc sulfate		X		

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Calcium Sulfate	X	X	X
7778-18-9			
Manganese Oxide	X		X
1344-43-0			
Zinc sulfate	X		X
7446-19-7			
Ferrous Sulfate		X	X
7782-63-0			

16. OTHER INFORMATION

Health Hazards Special Hazards NFPA **Flammability** Instability Not determined Not determined Not determined Not determined **Health Hazards Flammability** Physical hazards **Personal Protection HMIS** Not determined Not determined Not determined Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet
