



Rooted in Science

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade Name Pervade + Fe

SDS Date October 21, 2025

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Wetting agent

Uses Advised Against: To be used only where there is a recognized need. Do not exceed the appropriate dose rates.

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer:

Floratine Products Group, Inc.
355 East South Street
Collierville, TN 38017
+1 901-853-2898

1.4 Emergency Telephone Number

Emergency Spill Information 1(800) 535-5053 for US and Canada (INFOTRAC)
+1(352) 323-3500 for International Calls (call INFOTRAC collect)

Other Product Information: cs@floratine.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

CLP/GHS Classification (1272/2008):

Eye Damage Category 1

Eye Irritation Category 2

Skin Irritation Category 2

2.2 Label Elements

Danger!



Contains Proprietary blend of Di-sulfosuccinate Surfactants

Hazard Phrases

H315 Causes skin irritation.

H319 Causes eye irritation.

H318 Causes serious eye damage.

Precautionary Phrases

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves, eye protection and face protection.

P302+P353 IF ON SKIN: Wash with soap and water.

P332+P313 IF skin irritation occurs: Get medical attention.

P262+P364 Remove immediately all contaminated clothing and wash it before reuse.

P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P310 Immediately call a POISON CENTER or physician.

2.3 Other Hazards: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number / EINECS Number / REACH Reg. Number	% (w/w)	CLP/GHS Classification (1272/2008)
Proprietary blend of Di-sulfosuccinate Surfactants	Mixture	5-10%	Skin Irrit. 2 (H315) Eye Dam 1 (H318)
Iron Citrate	Proprietary	30-40%	Eye Irrit. 2 (H319)
Ammonium Citrate	Proprietary	15-25%	Eye Irrit. 1 (H318)

See Section 16 for full text of GHS and EU Classifications.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

First Aid

Eye contact: In case of contact with eyes, flush immediately with water for at least 15 minutes while lifting the upper and lower lids. Get immediate medical attention.

Skin contact: Wash with soap and water. Get medical attention.

Inhalation: Remove victim to fresh air. Get medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. If the person is alert, have them rinse their mouth with water and sip one glass of water. Call a poison center or physician for advice. Never give anything by mouth to an unconscious or drowsy person.

See Section 11 for more detailed information on health effects.

4.2 Most Important symptoms and effects, both acute and delayed: Causes severe eye irritation or damage. Causes skin irritation. Swallowing may cause nausea and diarrhea.

4.3 Indication of any immediate medical attention and special treatment needed: If eye contact occurs, get immediate medical attention.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media: Use water, foam, carbon dioxide or dry chemicals. Cool fire exposed containers with water.

5.2 Special Hazards Arising from the Substance or Mixture

Unusual Fire and Explosion Hazards: None

Combustion Products: Carbon monoxide, carbon dioxide, sulfur oxides, Iron and various hydrocarbons.

5.3 Advice for Fire-Fighters: Self-contained breathing apparatus and protective clothing should be worn in

fighting fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate protective equipment. Avoid direct contact with spilled material.

6.2 Environmental Precautions:

Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations.

6.3 Methods and Material for Containment and Cleaning Up:

Collect with an inert absorbent material and place in an appropriate container for disposal. Wash spill site with water. Contain large spills and collect as much liquid as possible into containers for use.

6.4 Reference to Other Sections:

Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

SECTION 7: HANDLING and STORAGE

7.1 Precautions for Safe Handling:

Prevent contact with eyes. Avoid contact with skin and clothing. Use with adequate ventilation. Use reasonable care in handling. Do not eat, drink or smoke while using the product. Wash thoroughly with soap and water after handling.

7.2 Conditions for Safe Storage, Including any Incompatibilities:

Protect containers from physical damage. Do not store below 40° F. Keep containers closed. Empty containers retain product residues. Follow all SDS precautions in handling empty containers. Store away from food and feed.

7.3 Specific end use(s):

Industrial uses: None identified

Professional uses: Wetting agent

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	US OEL	EU IOEL	UK OEL	Biological Limit Value
Proprietary blend of Di-sulfosuccinate Surfactants	None Established	None Established	None Established	None Established
Iron Citrate	None Established	None Established	None Established	None Established
Ammonium Citrate	None Established	None Established	None Established	None Established

8.2 Exposure Controls:

Recommended Monitoring Procedures: None.

Appropriate Engineering Controls: Good outdoor ventilation should be adequate under normal conditions.

Personal Protective Measures

Eye/face Protection: Chemical goggles recommended to prevent eye contact.

Skin Protection: Impervious clothing is recommended if needed to avoid skin contact.

Hands: Impervious gloves are recommended if needed to avoid skin contact.

Respiratory Protection: None needed under normal use conditions with adequate ventilation. If mists are irritating, an approved organic vapor respirator can be used. Use respirators in accordance with local and national regulations.

Other protection: Suitable washing facilities should be available in the work area.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties

Appearance: Clear to slightly yellow liquid

Odor Threshold: Not applicable

Melting/Freezing Point: Not determined

Flash Point: 130°C (266°F)

Lower Flammability Limit: Not applicable

Upper Flammability Limit: Not applicable

Vapor Density(Air=1): Not determined

Solubility: Complete

Autoignition Temperature: None

Viscosity: Not determined

Oxidizing Properties: None

Molecular Formula: Mixture

Odor: No odor.

pH: 6.18

Boiling Point: 101.1°C (214°F)

Evaporation Rate: Not determined

Vapor Pressure: Not determined

Relative Density: 1.256

Octanol/Water Partition Coefficient: Not determined

Decomposition Temperature: Not determined

Explosive Properties: None

Specific Gravity (H₂O= 1): 1.256

Molecular Weight: Mixture

9.2 Other Information: None available

SECTION 10: STABILITY and REACTIVITY

10.1 Reactivity: Not reactive under normal conditions.

10.2 Chemical Stability: Stable.

10.3 Possibility of Hazardous Reactions: None known.

10.4 Conditions to Avoid: None known.

10.5 Incompatible Materials: Incompatible with oxidizing agents and bases.

10.6 Hazardous Decomposition Products: Decomposition may produce carbon dioxide, carbon dioxide, sulfur oxides and various hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Potential Health Effects:

Eye Contact: Causes irritation with redness, tearing and stinging. Eye damage may occur.

Skin contact: May cause redness and irritation.

Inhalation: Excessive inhalation of mists may cause upper respiratory tract irritation.

Ingestion: Swallowing may cause gastrointestinal effects including nausea.

Acute toxicity: No toxicity data available for the product

Proprietary blend of Di-sulfosuccinate Surfactants: Oral rat LD50 >3000 mg/kg, Dermal rabbit LD50 >10,000 mg/kg.

Skin corrosion/irritation: Proprietary blend of Di-sulfosuccinate Surfactants: Irritating rabbit skin.

Eye damage/ irritation: 2-Methyl-2, 4-Pentenediol: Mildly irritating to rabbit eyes. Proprietary blend of Di-sulfosuccinate Surfactants: Causes irreversible damage to rabbit eyes.

Respiratory Irritation: No data available. Expected to cause only temporary irritation.

Respiratory Sensitization: No data available

Skin Sensitization: Proprietary blend of Di-sulfosuccinate Surfactants: Not sensitizing in human patch tests.

Germ Cell Mutagenicity: Proprietary blend of Di-sulfosuccinate Surfactants: Negative in the AMES test and ambiguous in an in vitro mammalian chromosome aberration test.

Carcinogenicity: No data available. None of the components of this product are listed as carcinogens by IARC.

Reproductive Toxicity: Proprietary blend of Di-sulfosuccinate Surfactants: In a three generational oral study, rats were administered Proprietary blend of Di-sulfosuccinate Surfactants in their diet. No reproductive or developmental effects were seen. NOEL is a 1% Proprietary blend of Di-sulfosuccinate Surfactants. 2- **Specific Target Organ Toxicity:**

Single Exposure: No data available

Repeat Exposure: No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity: No toxicity data is available for the product.

Proprietary blend of Di-sulfosuccinate Surfactants: 96 hr. Danio rerio 49 mg/L, 48 hr EC50 daphnia magna 6.6 mg/L, 72 hr EC50 Desmodesmus subspicatus 22 mg/L

12.2 Persistence and degradability: Proprietary blend of Di-sulfosuccinate Surfactants is readily biodegradable (91.1% in 28 days).

12.3 Bioaccumulative Potential: The BCF for Proprietary blend of Di-sulfosuccinate Surfactants is estimated to be 1.9.

12.4 Mobility in Soil: Pervade is a penetrating wetting agent designed to increase the movement of water through soil.

12.5 Results of PBT and vPvB assessment: Not required.

12.6 Other Adverse Effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Dispose in accordance with local/ and national regulations. Not considered hazardous waste according to EU regulations.

SECTION 14: TRANSPORTATION INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not Regulated			
IMDG	None	Not Regulated			
IATA/ICAO	None	Not Regulated			

14.6 Special Precautions for User: None

14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code: Not determined.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

US Regulations

CERCLA Section 103: The normal application of fertilizers is exempt from CERCLA reporting. If an accidental release occurs, contact Floratine Products Group for information.

SARA Hazard Category (311/312): Acute Health Hazard

SARA 313: Products used in routine agricultural operations and fertilizers held for resale by retailers are excluded from SARA 313 reporting. Contact Floratine Products Group for additional information.

California Proposition 65: This product contains the following substances known to the State of California to cause cancer and/or reproductive harm (birth defects): None

International Chemical Inventories

US EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory or exempt.

Australia: All the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

SECTION 16: OTHER INFORMATION

CLP/GHS Classification and H Phrases for Reference (See Section 3)

Skin Irrit 2 Skin Irritation Category 2
Eye Dam 1 Eye Damage Category 1
Eye Irrit. 2 Eye Irritation Category 2
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.

This safety data sheet provides health and safety information. The product is to be used in applications consistent with best farming practice. Individuals handling this product should be informed under COSHH of the recommended safety precautions and should have access to this information. The product information data sheet is to the best of Floratine's knowledge correct as at the date of publication. Neither Floratine, importer or local supplier accepts liability for any loss or damage resulting from reliance on this information. Further information on this product may be obtained from the supplier whose name, address and telephone number will be found on the product container. The information provided herein is offered solely for your consideration, investigation and verification. This information herein is provided by Floratine in good faith as accurate at the time of writing but without guarantee. This information includes information which has been generated by other parties and provided to Floratine and which Floratine has not independently verified. The information provided herein relates only to the specific product designated and may not be valid if the product is used in combination with any other materials or in any process.