



*Rooted in Science*

## SAFETY DATA SHEET

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

#### 1.1 Product Identifier

**Trade Name** Pervade

**SDS Date** May 26, 2015

#### 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) 424-9300 for US and Canada (CHEMTREC)  
+1(703) 527-3887 for International Calls (call CHEMTREC collect)

**Other Product Information:** [cs@floratine.com](mailto:cs@floratine.com)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the Substance or Mixture

##### CLP/GHS Classification (1272/2008):

Eye Damage Category 1

Skin Irritation Category 2

**EU Classification (67/548/EEC):** Irritant (Xi) R38, R41

#### 2.2 Label Elements

**Danger!**



Contains Proprietary blend of Di-sulfosuccinate Surfactants

##### Hazard Phrases

H315 Causes skin 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****3.2 Mixtures**

Chemical Name	CAS Number / EINECS Number / REACH Reg. Number	% (w/w)	EU Classification (67/548/EEC)	CLP/GHS Classification (1272/2008)
Proprietary blend of Di-sulfosuccinate Surfactants	Mixture	10-40%	Xi R41, R38	Skin Irrit. 2 (H315) Eye Dam 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 chemical. 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 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 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

**8.2 Exposure Controls:**

**Recommended Monitoring Procedures:** None.

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

**Personal Protective Measurers**

**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.

<b>SECTION 9: PHYSICAL and CHEMICAL PROPERTIES</b>
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**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:** 4.0

**Boiling Point:** 101.1°C (214°F)

**Evaporation Rate:** Not determined

**Vapor Pressure:** Not determined

**Relative Density:** 1.00

**Octanol/Water Partition Coefficient:** Not determined

**Decomposition Temperature:** Not determined

**Explosive Properties:** None

**Specific Gravity (H<sub>2</sub>O= 1):** 1.00

**Molecular Weight:** Mixture

**9.2 Other Information:** None available

<b>SECTION 10: STABILITY and REACTIVITY</b>
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**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.

<b>SECTION 11: TOXICOLOGICAL INFORMATION</b>
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**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 to 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 or the EU Dangerous Substances Directive.

**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 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 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 PVT and vPvB assessment:** Not required.

**12.6 Other Adverse Effects:** No data available.

<b>SECTION 13: DISPOSAL CONSIDERATIONS</b>
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**13.1 Waste Treatment Methods:**

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

<b>SECTION 14: TRANSPORTATION INFORMATION</b>
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	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
<b>US DOT</b>	None	Not Regulated			
<b>Canadian TDG</b>	None	Not Regulated			
<b>IMDG</b>	None	Not Regulated			
<b>IATA/ICAO</b>	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.

<b>SECTION 15: REGULATORY INFORMATION</b>
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**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 is 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.

<b>SECTION 16: OTHER INFORMATION</b>
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**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.