



*Rooted in Science*

## SAFETY DATA SHEET

Regulation (EC) 1907/2006, Regulation (EC) 1272/2008,  
Regulation (EC) 2020/878

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

#### 1.1 Product Identifier

**Trade Name** Citric Cycle 0-11-25  
**Unique Formula Identifier (UFI)**  
**SDS Date** February 14, 2023

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

**Product Use:** Foliar Nutrient  
**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

**EU Contact:**

TURF Handels GmbH  
Street: Am Hartboden 48  
Place: A-8101 Gratkorn  
Dr. Gans-Eichler e-mail: [info@tge-consult.de](mailto:info@tge-consult.de)  
Chemieberatung GmbH Tel.: +49 (0)251/924520-60  
Raesfeldstr. 22 [www.tge-consult.de](http://www.tge-consult.de)  
D-48149 Münster

#### 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](mailto:cs@floratine.com)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the Substance or Mixture

**CLP/GHS Classification (1272/2008):**  
Eye Irritation Category 2

#### 2.2 Label Elements

**Warning!**



Precautionary Phrases:

Hazard Phrases:

H319 Causes serious eye irritation.

Precautionary Phrases:

P264 Wash hands thoroughly after handling.

P280 Wear eye protection.

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

P337 + P313 If eye irritation persists: Get medical attention.

### 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)
Potassium Phosphite	13977-65-6/604-162-9	20-30%	Eye Irrit. 2 (H319)
Monopotassium Phosphate	7778-77-0/231-913-4 01-2119490224-41-0047	10-15%	Not Classified (REACH registration number)
Potassium Thiosulfate	10294-66-3 /233-666-8 / 01-2119537328-35-0003	10-25%	Not Classified (REACH registration number)

See Section 16 for full text of GHS Classifications.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of First Aid Measures

#### First Aid

**Eye contact:** Immediately flush eye with water for at least 15 minutes while lifting the upper and lower lids. Get medical attention if irritation persists.

**Skin contact:** Wash with soap and water. Get medical attention if irritation develops.

**Inhalation:** Remove victim to fresh air. Get medical attention if irritation 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 of 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 eye irritation. May cause skin irritation on prolonged or repeated use. Ingestion may cause gastrointestinal irritation with nausea and diarrhea.

**4.3 Indication of any immediate medical attention and special treatment needed:** Immediate medical attention should not be needed unless large amounts are swallowed.

## SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing Media:** Use any media that is suitable for the surrounding fire. Water can be used to cool fire exposed containers

**5.2 Special Hazards Arising from the Substance or Mixture****Unusual Fire and Explosion Hazards:** None**Combustion Products:** None**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:**

Avoid eye and prolonged skin contact. 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. Keep from freezing. Keep containers closed. Empty containers retain product residues. Follow all SDS precautions in handling empty containers. Store away from food and feed. Store away from oxidizing materials.

**7.3 Specific end use(s):****Industrial uses:** None identified**Professional uses:** Foliar Nutrient**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control Parameters:**

Chemical Name	US OEL	EU IOEL	UK OEL	Biological Limit Value
Potassium Phosphite	None Established	None Established	None Established	None Established
Monopotassium Phosphate	None Established	None Established	None Established	None Established
Potassium Thiosulfate	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 avoid eye contact.

**Skin Protection:** Impervious clothing is recommended if needed to avoid prolonged/repeated skin contact.

**Hands:** Impervious gloves are recommended if needed to avoid prolonged/repeated skin contact.

**Respiratory Protection:** None needed under normal use conditions with adequate ventilation. If mist is irritating, an approved particulate 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:** Light brown liquid

**Physical State:** Liquid

**Odor Threshold:** Not applicable

**Melting/Freezing Point:** Not available

**Flammability:** Not flammable

**Lower Flammability Limit:** None

**Upper Flammability Limit:** None

**Relative Vapor Density at 20°C (Air=1):** Same as water

**Solubility:** Soluble in water

**Autoignition Temperature:** None

**Kinematic Viscosity:** Not established

**Odor:** No odor.

**Color:** Brown

**pH:** 8.74

**Boiling Point:** 104-110°C

**Flash Point:** Not applicable

**Particle Characteristics:** Not applicable

**Vapor Pressure at 50°C:** Greater than 1

**Relative Density:** 1.551

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

**Decomposition Temperature:** Not applicable

#### 9.2.1 Other Information:

**Oxidizing Properties:** None

**Molecular Formula:** Mixture

**Evaporation Rate:** Same as water

**Explosive Properties:** None

**Specific Gravity (H<sub>2</sub>O= 1):** 1.551

**Molecular Weight:** Mixture

**9.2.2 Other Safety Characteristics:** None determined.

## SECTION 10: STABILITY and REACTIVITY

**10.1 Reactivity:** Not reactive under normal conditions

**10.2 Chemical Stability:** Stable.

**10.3 Possibility of Hazardous Reactions:** Contact with strong oxidizers may cause an exothermic reaction producing heat.

**10.4 Conditions to Avoid:** Avoid excessive heat and freezing.

**10.5 Incompatible Materials:** Incompatible with oxidizing agents.

**10.6 Hazardous Decomposition Products:** None known.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological Effects:

**Potential Health Effects:**

**Eye Contact:** Causes irritation with redness and tearing.

**Skin contact:** Prolonged skin contact may cause irritation.

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

**Ingestion:** Swallowing may cause gastrointestinal effects including nausea and diarrhea

**Acute toxicity:** Based on available data, the classification criteria are not met.  
Potassium Phosphite: Oral rat LD50 >2980 mg/kg, dermal rabbit LD50 >7940 mg/kg,  
Inhalation rat LC50 >1.1 mg/L/4 hr.

**Skin corrosion/irritation:** Based on available data, the classification criteria are not met. Potassium Phosphite are not irritating to rabbit skin.

**Eye damage/ irritation:** Potassium Phosphite is moderately irritating to rabbit eyes.

**Respiratory Sensitization:** Based on available data, the classification criteria are not met.

**Skin Sensitization:** Based on available data, the classification criteria are not met.

**Germ Cell Mutagenicity:** Based on available data, the classification criteria are not met.

**Carcinogenicity:** Based on available data, the classification criteria are not met. None of the components of this product are listed as carcinogens by IARC or the EU CLP.

**Reproductive Toxicity:** Based on available data, the classification criteria are not met. In a reproductive study, mice were administered potassium phosphite for days 6-15 of gestation. NOEL >320 mg/kg for maternal and developmental toxicity.

**Aspiration Hazard:** Based on available data, the classification criteria are not met.

**Specific Target Organ Toxicity:**

Single Exposure: Based on available data, the classification criteria are not met.

Repeat Exposure: Based on available data, the classification criteria are not met.

## 11.2 Information on Other Hazards

**11.2.1 Endocrine Disrupting Properties:** None known.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1 Toxicity:** Aspiration Hazard: Based on available data, the classification criteria are not met.  
Potassium Phosphite: 96 hr. LC50 rainbow trout >100 mg/kg; 48 hr EC50 daphnia magna >100 mg/kg

**12.2 Persistence and degradability:** Biodegradation is not applicable to inorganic substances such as potassium phosphite.

**12.3 Bio accumulative Potential:** No data available. Not expected to be bioaccumulative.

**12.4 Mobility in Soil:** In the soil, the product follows the natural cycle to provide plant nutrients.

**12.5 Results of PVT and vPvB assessment:** Not required.

**12.6 Endocrine disrupting Properties:** None known.

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

<b>SECTION 13: DISPOSAL CONSIDERATIONS</b>
--

**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>
---

	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>EU ADR/RID</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 IMO Instruments:** Not determined.

<b>SECTION 15: REGULATORY INFORMATION</b>
---

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

**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.

**Canadian Environmental Protection Act:** All the components in this product are listed on the Domestic Substances List (DSL) or exempt.

**China:** All the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

**Japan:** All the components in this product are listed on the Japanese Existing and New Chemical Substances (ENCs) inventory or exempt.

**Korea:** All the components in this product are listed on the Korean Existing Chemicals List (KECL) or exempt.

**New Zealand:** All the components in this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempt.

**Philippines:** All the components of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or exempt.

**Taiwan:** All the components of this product are listed on the National Existing Chemical Inventory (NECI) in Taiwan or exempt.

<b>SECTION 16: OTHER INFORMATION</b>
--------------------------------------

**Date:** February 14, 2023

**Revision History:** Format change for Regulation (EC) 2020/878 update: Changes to all sections.

**Date of Previous SDS:** February 14, 2023

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

Eye Irrit. 2 Irritation Category 2

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.