SAFETY DATA SHEET

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

1.1 Product Identifier

Trade Name FP-747

SDS Date May 26, 2015

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

Product Use: Acidifying 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

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

CLP/GHS Classification (1272/2008):
Skin Corrosion Category 1C

EU Classification (67/548/EEC): Corrosive C R34, R52/53

2.2 Label Elements

Danger!

Contains Phosphoric Acid

Hazard Phrases
H314 Causes severe skin burns and eye damage.

Precautionary Phrases:
P260 Do not breathe mists.
P264 Wash thoroughly after handling.
P280 Wear protective gloves, protective clothing, eye protection and face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P363 Wash contaminated clothing before reuse.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents or container in accordance with national regulations.

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)**
Phosphoric Acid	7664-38-2 / 231-633-2	10-20%	Skin Corr 1B (H314)
Surfactants	Proprietary	10-20	Eye Dam 2 (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: Immediately flush eye with water for at least 15 minutes while lifting the upper and lower lids. Seek immediate medical attention.

Skin contact: Remove contaminated clothing. Wash with soap and water. Get immediate medical attention. Launder clothing before reuse.

Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

Ingestion: Do not induce vomiting unless directed to do so my 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 my 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 and skin irritation or damage. Inhalation of mists may cause irritation of the upper respiratory tract. Severe overexposure may result in pulmonary edema. Swallowing may cause gastrointestinal irritation or burns with nausea, vomiting and diarrhea.

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

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: Not combustible

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, skin and clothing. Do not breathe vapors or mists. 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 handing.

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.

7.3 Specific end use(s):
Industrial uses: None identified
Professional uses: Acidifying agent

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	US OEL	EU IOEL	UK OEL	Biological Limit Value
Phosphoric Acid	1 mg/m3 TWA ACGIH TLV 1 mg/m3 TWA OSHA PEL	1 mg/m3 TWA 2 mg/m3 STEL	1 mg/m3 TWA 2 mg/m3 STEL	None Established
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 to prevent skin contact.

Hands: Impervious gloves are recommended to prevent skin contact.

Respiratory Protection: None needed under normal use conditions with adequate ventilation. If mists are 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: Slightly yellow viscous liquid
Odor Threshold: Not applicable
Melting/Freezing Point: Not available
Flash Point: None
Lower Flammability Limit: None
Upper Flammability Limit: None
Vapor Density(Air=1): Not available
Solubility: Complete
Autoignition Temperature: None
Viscosity: Not applicable
Oxidizing Properties: None
Molecular Formula: Mixture

Odor: No odor.
pH: 1.0 -1.5
Boiling Point: 101ºC
Evaporation Rate: Not determined
Vapor Pressure: Not available

Relative Density: 1.08 @ 20°C
Octanol/Water Partition Coefficient: Not established
Decomposition Temperature: Not available
Explosive Properties: None
Specific Gravity (H_2O= 1): 1.08 @ 20°C
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: Carbon monoxide and carbon dioxide.

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: Skin contact may cause severe irritation or burns.

Inhalation: Excessive inhalation of mists may cause upper respiratory tract irritation, coughing sneezing and difficulty in breathing. Severe overexposure may cause pulmonary edema. .

Ingestion: Swallowing may cause severe gastrointestinal irritation or burns with nausea, vomiting and diarrhea.

Acute toxicity: No acute toxicity data available for the product. Calculated ATE for the mixture: Oral 7258 mg/kg
Phosphoric Acid: Oral rat LD50 2600 mg/kg; Dermal rabbit LD50 2740 mg/L
Surfactants: Oral rat LD50 3160 mg/kg.

Skin corrosion/irritation: Potassium hydroxide is corrosive to rabbit skin. Surfactants are non-irritating to rabbit skin.

Eye damage/ irritation: Potassium hydroxide is corrosive to rabbit eyes. Surfactants are severely irritating to rabbit eyes.

Respiratory Irritation: No data available. Inhalation of mists may cause upper respiratory irritation or burns. Excessive exposure may cause pulmonary edema.

Respiratory Sensitization: No data available

Skin Sensitization: The surfactants did not cause skin sensitization when tested in humans.

Germ Cell Mutagenicity: Phosphoric acid was negative in an in vitro mammalian cell gene mutation assay, in an in vitro mammalian chromosome aberration test and AMES test. The surfactants were negative in an in vitro genetic study.

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: Not expected to cause reproductive or developmental toxicity.

Specific Target Organ Toxicity:

Single Exposure: No data available

Repeat Exposure: No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity: No data available on the product
Phosphoric Acid: No data available
Surfactants: 96 hr LC50 pimephales promelas 6.6 mg/L; 48 hr LC50 daphnia magna 21.6 mg/L

12.2 Persistence and degradability: The surfactants are not readily biodegradable.

12.3 Bioaccumulative Potential: No data available. Not expected to be bioaccumulative.

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

12.5 Results of PVT 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	UN1805	Phosphoric Acid Solution	8	PG III	No
Canadian TDG	UN1805	Phosphoric Acid Solution	8	PG III	No
EU ADR/RID	UN1805	Phosphoric Acid Solution	8	PG III	No
IMDG	UN1805	Phosphoric Acid Solution	8	PG III	No
IATA/ICAO	UN1805	Phosphoric Acid Solution	8	PG III	No

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 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): Formaldehyde (50-00-0) 19.5 ppm (cancer)

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.

SECTION 16: OTHER INFORMATION

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

Skin Corr 1B Skin Corrosion Category 1B

Eye Dam 1 Eye Damage Category 1

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

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.