

Safety Data Sheet: FLOURISH, O/G

Supersedes Date 10/27/2010

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name FLOURISH, O/G
Recommended use Fertilizer
Information on Manufacturer
MANTEK, DIVISION OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 0503
Chemical nature Aqueous solution
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Light green

Physical State Liquid

Odor Ammoniacal

GHS

Classification

Physical Hazards

None

Health Hazard

None

Other hazards

None

Labeling

Signal Word

Not classified

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Diammonium phosphate	7783-28-0	10-30
Monoammonium phosphate	7722-76-1	10-30
Potassium chloride	7447-40-7	3-7
Ammonium phosphate	10361-65-6	1-5
Potassium EDTA	7379-27-3	1-5

4. FIRST AID MEASURES

General advice

Avoid contact with skin, eyes and clothing. Avoid breathing mist.

Eye Contact

Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

Skin Contact

Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

Inhalation

If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Ingestion

Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur.

Notes to physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point > 201 °F / > 94 °C

Method Seta closed cup

Flammability Limits in Air % Not applicable.

Upper No data available **Lower** No data available

Suitable Extinguishing Media

Water spray. Foam. Carbon dioxide (CO2). Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Material can create slippery conditions.

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.

NFPA

Health 1

Flammability 1

Instability 0

HMIS

Health 1

Flammability 1

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
Environmental Precautions	Do not flush into surface water or sanitary sewer system.
Methods for Containment	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Methods for Cleaning Up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)
Neutralizing Agent	Not applicable.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Avoid breathing mist.			
Storage	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.			
Storage Temperature	Minimum	35 °F / 2 °C	Maximum	120 °F / 49 °C
Storage Conditions	Indoor	X	Outdoor	X
			Heated	Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Diammonium phosphate	No data available	No data available	No data available
Monoammonium phosphate	No data available	No data available	No data available
Potassium chloride	No data available	No data available	No data available
Ammonium phosphate	No data available	No data available	No data available
Potassium EDTA	No data available	No data available	No data available

Engineering Measures	Ensure adequate ventilation, especially in confined areas.
Personal Protective Equipment	
Eye/Face Protection	Safety glasses with side-shields.
Skin Protection	For prolonged or repeated contact, use protective gloves with appropriate chemical resistance.
Respiratory Protection	In case of inadequate ventilation wear respiratory protection.
General Hygiene Considerations	Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Viscosity	Non viscous
Color	Light green	Odor	Ammoniacal
Odor Threshold	Not applicable	Appearance	Transparent
pH	7.4	Specific Gravity	1.4
Evaporation Rate	0.36 (Butyl acetate=1)	Percent Volatile (Volume)	69.1
VOC Content (%)	0	VOC Content (g/L)	0
Vapor Pressure	11.1 mmHg @ 70°F	Vapor Density	0.7 (Air = 1.0)
Solubility	Completely soluble	n-Octanol/Water Partition	No data available
Melting Point/Range	No data available	Decomposition Temperature	No data available
Boiling Point/Range	212 °F / 100 °C	Flammability (solid, gas)	No data available
Flash Point	> 201 °F / > 94 °C	Method	Seta closed cup
Autoignition Temperature	No information available.		
Flammability Limits in Air %	Not applicable.	Upper	No data available
		Lower	No data available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	None known
Incompatible Products	Strong oxidizing agents
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx), Oxides of phosphorus, Phosphorus compounds, Ammonia.
Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	
Gas	No information available
Mist	No information available
Vapor	No information available

Principle Route of Exposure Skin contact, Eye contact, Inhalation.

Primary Routes of Entry None known

Acute Effects

Eyes	May cause eye irritation.
Skin	May cause skin irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Toxicity None known.

Target Organ Effects None known

Aggravated Medical Conditions Respiratory disorders, Skin disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Diammonium phosphate	= 6500 mg/kg (Rat)	> 7950 mg/kg (Rabbit)	no data available	no data available	no data available
Monoammonium phosphate	= 5750 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	no data available	no data available	no data available
Potassium chloride	= 2600 mg/kg (Rat)	no data available	no data available	no data available	no data available
Ammonium phosphate	no data available	no data available	no data available	no data available	no data available
Potassium EDTA	no data available	no data available	no data available	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Diammonium phosphate	no data available	no data available	no data available	no data available	no data available
Monoammonium phosphate	no data available	no data available	no data available	no data available	no data available
Potassium chloride	no data available	no data available	no data available	no data available	no data available
Ammonium phosphate	no data available	no data available	no data available	no data available	no data available
Potassium EDTA	no data available	no data available	no data available	no data available	no data available

Carcinogenicity

There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Diammonium phosphate	not applicable	not applicable	not applicable	not applicable	not applicable
Monoammonium phosphate	not applicable	not applicable	not applicable	not applicable	not applicable
Potassium chloride	not applicable	not applicable	not applicable	not applicable	not applicable
Ammonium phosphate	not applicable	not applicable	not applicable	not applicable	not applicable
Potassium EDTA	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information

No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Diammonium phosphate	no data available	LC50 = 26.5 mg/L Oncorhynchus mykiss 96 h LC50 24.8 - 29.4 mg/L Oncorhynchus mykiss 96 h LC50 = 3.3 mg/L Pimephales promelas 96 h LC50 = 33 mg/L Pimephales promelas 96 h	no data available	no data available	N/A
Monoammonium phosphate	no data available	no data available	no data available	no data available	N/A
Potassium chloride	EC50 = 2500 mg/L Desmodesmus subspicatus 72 h	LC50 = 1060 mg/L Lepomis macrochirus 96 h LC50 750 - 1020 mg/L Pimephales promelas 96 h	no data available	EC50= 825 mg/L 48 h EC50= 83 mg/L 48 h	N/A
Ammonium phosphate	no data available	no data available	no data available	no data available	N/A
Potassium EDTA	no data available	no data available	no data available	no data available	N/A

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal

14. TRANSPORT INFORMATION

DOT Not regulated
TDG Not regulated
ICAO Not regulated
IATA Not regulated
IMDG/IMO Not regulated

15. REGULATORY INFORMATION

Inventories

TSCA Complies
DSL Does not Comply

U.S. Federal Regulations

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

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Diammonium phosphate	7783-28-0	10-30	1.0
Monoammonium phosphate	7722-76-1	10-30	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	No	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Diammonium phosphate	Not applicable	Not applicable
Monoammonium phosphate	Not applicable	Not applicable
Potassium chloride	Not applicable	Not applicable
Ammonium phosphate	Not applicable	Not applicable
Potassium EDTA	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By Rachael Mohochi
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Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

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