

SAFETY DATA SHEET

SDS NUMBER: 1000654288-15-CPS

SDS REVISIONS: NEW

DATE OF ISSUE: 04/21/15

FLO-CAL 1

SUPERSEDES: NEW

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER****1.1 PRODUCT IDENTIFIER:****TRADE NAME:** FLO-CAL 1**1.2 RECOMMENDED USE:** WATER CONDITIONER FOR USE IN IRRIGATION WATER**1.3 SUPPLIER DETAILS:**CROP PRODUCTION SERVICES, INC.
P.O. Box 1286 • Greeley, CO 80632-1286**1.4 24-Hour Emergency Phone:** 1-800-424-9300 - **Medical Emergencies:** 1-866-944-8565**U.S. Coast Guard National Response Center:** 1-800-424-8802**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification according to 29 CFR 1910.1200**

Eye Irritation	Category 2B	H320
Skin Irritation	Category 2	H316
STOT SE	Category 3	H335

2.2 Label elements

Signal word: WARNING
 Hazard Statement: H320 – Causes eye irritation.
 H316 – Causes mild skin irritation.
 H335 – May cause respiratory irritation.

Precautionary
 Statement:

P261 – Avoid breathing dust / fume / gas / mist / vapors / spray
 P273 - Avoid release to the environment

(Prevention):

P280 - Wear protective gloves and eye / face protection

Precautionary

P337+P313 – If eye irritation persists: get medical attention

Statement:

P305+P351+P338 – IF IN EYES: Rinse with water for 15 to 20 minutes. Remove contact lenses, if present, and continue rinsing eyes.

(Response):

P302+P352 – IF ON SKIN: Wash with plenty of water for 15 to 20 minutes

Precautionary

Statement:

(General): P101+P102+P103 – If medical advice is needed, have product container or label available. Keep out of reach of children.

Read label before use

2.3 Other hazards

None known

KEEP OUT OF REACH OF CHILDREN –

Appearance and odor: Clear liquid with slight odor.

Potential Health effects

Routes of exposure Eye contact, skin contact, inhalation.

Eyes Causes eye irritation.

Skin Causes mild skin irritation.

Inhalation May cause respiratory irritation.

Ingestion May be irritating to mouth, throat, and stomach.

Target organs

Skin. Eyes. Inhalation.

Signs and symptoms

May cause irritation to the eyes, skin, gastrointestinal tract, and respiratory system.

Potential environmental effects

This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effect on the environment.

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3. COMPOSITION, INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name:	CAS No.	Classification	Concentration [%]
Calcium Nitrate Solution	Mixture	Eye Irrit. 2B: H320	~86.40
Citric Acid Solution	77-92-9	Skin Irrit.: 2 H316	~11.25
Water	7732-18-5	STOT SE 3: H335	Balance

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

- Eye contact:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.
- Skin contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Inhalation:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Risk of damage to eyes. Skin irritation. Mucous membrane irritation.

4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat symptomatically. Symptoms may be delayed.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565

Take container, label or product name with you when seeking medical attention.

NOTES TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Water fog, water spray, carbon dioxide (CO₂), foam. Do not use water jet as this will spread the fire.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: During a fire, irritating, corrosive and/or toxic gases may be produced.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

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6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow to enter drains, sewers, or watercourses.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up: Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water.
Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to Remove residual contamination.
Never return spills to original containers for re-use.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Avoid inhalation of vapors / spray and contact with eyes, skin and clothing. Do not breathe mist or vapor. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Use care in handling/storage. Wash before eating, drinking and/or smoking.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Keep container tightly closed. Store in a cool, dry, well-ventilated area. Do not store below 0°F (-17.7°C). Always use oldest stock first. Do not store near food, foodstuffs, drugs or potable water supplies.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (AIHA) WEELs – (ACGIH) TLVs®

Components	Type	Value
No data available		

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Specimen
No listings		

8.2 EXPOSURE CONTROLS:

Engineering Measures

Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors and spray mists. Provide eyewash station and safety shower.

Individual Protection Measures:

Eye / Face Protection: Goggles or shielded safety glasses are recommended.

Skin Protection: Chemical resistant clothing is recommended. Routinely wash work clothing and protective equipment to remove contaminants. The use of chemical-resistant gloves is recommended when handling undiluted product. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Respiratory Protection: In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment. Wear respiratory protection during operations where spraying or misting occurs. In the U.S.A., if respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE: Liquid
ODOR: Slight.
ODOR THRESHOLD: Not established.
COLOR: Clear.
pH: No data available.
MELTING POINT / FREEZING POINT: No data available
BOILING POINT: 212°F/100°C (Decomposes at 230°F)
FLASH POINT: Does not flash
FLAMMABILITY (solid, gas): Does not support combustion.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: Not applicable.
VAPOR PRESSURE: No data available.
SOLUBILITY: Soluble
PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available.
AUTO-IGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: Not determined
VISCOSITY: Not determined
SPECIFIC GRAVITY (Water = 1): 1.42 g/ml
BULK DENSITY: 11.86 lbs./gal / 1.42 kg/L

Note: These physical data are typical values based on material tested but may vary from sample to sample.
Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No reactions known under normal use conditions. Will not polymerize.

10.4 CONDITIONS TO AVOID

No data available.

10.5 INCOMPATIBLE MATERIALS

No data available

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

No data available

11. TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Skin contact, eye contact.

LC₅₀ (rat): No data available.

LD₅₀ Oral (rat): 6,730 mg/kg (Citric Acid)

LD₅₀ Dermal (rat): No data available

Acute Toxicity Estimates: No data available

Skin Irritation (rabbit): Causes mild irritation

Eye Irritation (rabbit): Causes irritation

Specific Target Organ Toxicity: Single exposure: No data available.

Aspiration: No data available

Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenicity: No data available

Germ Cell Mutagenicity: No data available

Interactive Effects: None known

12. ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ecotoxicological Data

Components	Species	Test Results
No data available		

Drift or runoff may adversely affect non-target plants.
 Do not apply directly to water.
 Do not contaminate water when disposing of equipment wash water.
 Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available.

12.4 MOBILITY IN SOIL

No data available

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Do not reuse containers for any purpose. Container is recyclable, and is to be disposed of at a container collection site. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: Triple or pressure-rinse the empty container, adding the rinsate to the spray tank. Make the empty container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION

14.1 LAND TRANSPORT

DOT Shipping Description: NOT REGULATED BY US DOT

U.S. Surface Freight Classification: ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS 60)

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:

NFPA		HMIS	
1 Health	0 Least	1 Health	
0 Flammability	1 Slight	0 Flammability	
0 Instability	2 Moderate	0 Reactivity	
	3 High	B PPE	
	4 Severe		

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:	Immediate	<u>Y</u>	Fire	<u>N</u>	Sudden Release of Pressure	<u>N</u>
	Delayed	<u>N</u>	Reactive	<u>N</u>		

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Reportable Quantity (RQ) under U.S. CERCLA: Not listed.

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: Not applicable.

16. OTHER INFORMATION

SDS STATUS: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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