

Safety Data Sheet (SDS)

1. Identification

Product identifier used on label: Express 300

Other means of identification, synonyms, etc.: None

Recommended use of the product and restrictions on use: Hydration and feeding treatment for cut flowers.

Manufacturer/Supplier:

Company name: Floralife, DBA a division of Smithers-Oasis Company
Address: 751 Thunderbolt Drive
Waterboro, SC 29488 US
Phone: 843-538-3839
Fax: 800-471-4248
Website: www.floralife.com

Emergency telephone number(s):

Emergency Contact:

Rocky Mountain Poison & Drug Center: 303-623-5716 or 877-740-5015

Transportation Emergency: CHEMTREC: 800-424-9300

2. Hazards Identification

Classification of the substance or mixture:

Physical hazards: Not classified.

Health hazards: Sensitization, skin Category 1

OSHA defined hazards: Not classified.

Label elements:



Signal word: Warning.

Hazard statements: May cause an allergic skin reaction

Precautionary statements:

Prevention: Avoid breathing mist or spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

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Response:	If skin irritation or rash occurs: Get medical advice/ attention. IF ON SKIN: Wash with plenty of water. Wash contaminated clothing before reuse.
Storage:	Store away from incompatible materials.
Disposal:	Dispose of contents/ container in accordance with local/ national regulations – see Section 13.

Hazards not otherwise classified: None.

3. Composition Information on Ingredients

Mixtures:

Chemical name & concentration	CAS #	%
Citric Acid	77-92-9	1 - < 3
5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-4-isothiazolin-3-one	55965-84-9	< 0.1
Other components below reportable levels		90 - 100

4. First Aid Measures

General information:

Inhalation:	Move to fresh air. If symptoms develop or persist, call a physician.
Skin contact:	IF ON SKIN: Wash with plenty of water. If eczema or other skin disorders develops, seek medical attention and take this SDS along.
Eye contact:	Rinse with water. If eye irritation develops and persists: Get medical attention
Ingestion:	Rinse mouth. If symptoms occur: Get medical attention.

**Most important symptoms/
effects, acute and delayed:** May cause an allergic skin reaction such as dermatitis or rash.

**Indication of immediate medical
attention and special
treatment needed:**

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information:

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

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5. Fire Fighting Measures

Suitable extinguishing media: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/ Instructions: Move containers from fire area if you can do so without risk.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: This product is not flammable or combustible.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personal away. Keep people away from and upwind of spill/ leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or spray. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of this SDS.

Methods and material for containment and cleaning up: Should not be released into the environment.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area 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. For waste disposal, see Section 13 of this SDS.

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Environmental

precautions: Avoid discharge into drains, water courses or into the ground.

7. Handling and Storage

Precautions for safe handling: Avoid breathing mist or spray. Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store in tightly closed container. Store away from incompatible materials, see Section 10 of this SDS.

8. Exposure Controls / Personal Protection

Occupational exposure limits: No exposure limits need for ingredient(s).

Biological limit values: No biological exposure limits noted for the ingredients.

Appropriate engineering controls: Good general ventilation (typically 6 to 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Minimize splashing, or wear eye protection.

Skin protection

Hand protection: Should skin irritation develop, wearing of nitrile latex or rubber gloves are acceptable.

Other: If desired, wearing of long sleeve clothing is acceptable.

Respiratory protection: In case of insufficient ventilation, set up a portable fan.

Thermal hazards: Not applicable.

General hygienic considerations: Always observe good hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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9. Physical and chemical properties

Appearance:	
Physical state:	Liquid
Color:	Clear, slightly yellow.
Odor:	No odor.
Odor threshold:	Not available.
Vapor pressure at 20 °C (68 °F):	Not available.
Vapor density:	Heavier than air.
Relative density:	1.19 g/ml
pH value:	2.1 – 2.2.
Change in condition:	
Melting point/Melting range:	32 °F
Boiling point/Boiling range:	212 °F
Flash point:	Not flammable.
Flammability (solid, gaseous):	Not available.
Flammable or explosion limits:	
Lower/Upper:	Not available.
Ignition temperature:	Not available.
Auto ignition temperature:	Not available.
Decomposition temperature:	Not available.
Danger of explosion:	Not explosion.
Solubility in/miscibility with water:	Soluble.
Evaporation rate:	Not available.
Partition coefficient (n-octanol/water):	Not available.
Viscosity:	Not available.
Dynamic/Kinematic:	Not available.
Solvent content:	
Organic solvents:	Not available.
Water:	> 40 - 50%.
Solids content:	Not available.
Other information:	Not available.

10. Stability and Reactivity

Reactivity: This product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Reacts violently with strong alkaline substances.

Conditions to avoid: Contact with incompatible materials.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: No hazardous decomposition products are known.

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11. Toxicological information

Information on the likely routes of exposure:

Inhalation:	No adverse effects due to inhalation are expected.
Skin contact:	May cause an allergic skin reaction.
Eye contact:	Direct contact with eyes may cause temporary irritation.
Ingestion:	Expected to be a low ingestion hazard.

Symptoms related to the Physical, chemical and

Toxicological characteristics: May cause an allergic skin reaction such as dermatitis or rash.

Information on toxicological effects:

Acute Toxicity:	May cause an allergic skin reaction.
Skin corrosion/ irritation:	Prolonged skin contact may cause temporary irritation.
Serious eye damage/ Eye irritation:	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization:	
Respiratory sensitization:	Not a respiratory sensitizer.
Skin sensitization:	May cause an allergic skin reaction.
Germ cell mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity:	Not classifiable as to carcinogenicity to humans.
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure:	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure:	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard:	Not an aspiration hazard.
Further information:	Prolonged inhalation may be harmful.

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12. Ecological Information

Ecotoxicity: May be harmful to aquatic life with long lasting effects.

Components	Species	Test Results
5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-4-isothiazolin-3-one		

Aquatic: Acute

Algae	EC50	Algae	0.06 mg/l, 96 hours
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Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: No data available.

Mobility in soil: The product is soluble in water..

Other adverse effects: No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions: Rinse the container of any residual solution. Reuse or recycle the container.

Local disposal regulations: Dispose in accordance with all local waste regulations or sewer ordinances.

Hazardous waste code: This product would not be expected to have a waste code.

Waste from residues/reused Products: Dispose of in accordance with local regulations or sewer ordinances.

Contaminated packaging: Rinse the container of any residual solution. Reuse or recycle the container.

14. Transport Information

DOT Non-Bulk: Not regulated as dangerous goods.

DOT Bulk: Not regulated as dangerous goods.

IATA: Not regulated as dangerous goods.

IMDG: Not regulated as dangerous goods.

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**Transport in bulk according to Annex II
Of MARPOL 73/78 and the IBC Code 4:** Not established.

15. Regulatory Information

US Federal Regulations: This material is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):
Not regulated.

US OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
Not regulated.

CERCLA Hazardous Substance List (29 CFR 1910.1001-1050):
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard categories:	Acute (Immediate) Health Hazard:	No
	Chronic (Delayed) Health Hazard:	No
	Fire Hazard:	No
	Reactive Hazard:	No
	Sudden Release of Pressure:	No

SARA 302 Extremely hazardous substances: No

SARA 311/312 Hazardous chemical: No

SARA 313 (TRI Reporting): No

Other Federal Regulations:

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List:
Not regulated.

Clean Air Act (CAA) Section 112® Accidental Release Prevention (40 CFR 68.130):
Not regulated.

Safe Drinking Water Act (SDWA):
Not regulated.

US state regulations:

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986.
This product contains chemical(s) known to the State of California to cause cancer or reproductive harm.

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International Inventories:

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substance List (DSL)	No
Canada	Non-Domestic Substance List (NDSL)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

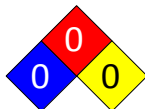
*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) or is exempt from listing.

A "No" indicates that one or more components of the product are not listed on the inventory administered by the governing country(s).

16. Other Information, including date of preparation or last revision:

NFPA ratings (scale 0 - 4)

Health = 0
Fire = 0
Reactivity = 0



HMIS-ratings (scale 0 - 4)

Health = 0
Fire = 0
Reactivity = 0

Classification system: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe

Disclaimer:

Floralife, DBA a division of Smithers-Oasis Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.