

Safety Data Sheet

No.

*** Section 1 – Product and Company Identification ***

Product Name : CARBO-RATER
Product Use : Liquid Foliar Fertilizer
Synonyms : None
Manufacturer/Supplier : Triangle Chemical Company
Address : 117 Preston Court
Macon, GA 31210
Company Web Site : Info@trianglecc.com
Corporate Telephone Number : (478)743-1548

*** Section 2 - Hazards Identification ***

Classification of the substance or mixture: This product is classified and labeled according to Global Harmonized System (GHS)



Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H320 - Causes eye irritation
H333 - May cause respiratory irritation

Precautionary statements (GHS-US) : P101 - If medical advice is needed, have product label/container at hand
P102 - Keep out of Reach of Children
P103 - Read label before use
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P264 - Wash ... thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a poison center/doctor/... if you feel unwell
P337+P313 - If eye irritation persists: Get medical advice/attention
P403+P233 - Store in a well-ventilated place. Keep container tightly closed

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P501 - Dispose of contents/container to ... specify in accordance with local/regional/national regulations

National Fire Protection Classification Association (NFPA)

Rating : Health 1 Fire 0 Reactivity 0

NFPA Rating Level : 0-Minimum; 1-Slight; 2- Moderate; 3-High 3 High; 4-Extreme



HEALTH	1
FIRE	0
REACTIVITY	0

HMIS (OSHA) Classification Rating :

Health 1 Fire 0 Reactivity 0

HMIS Rating Level : 0-Minimum; 1-Slight; 2- Moderate; 3-High 3 High; 4-Extreme

Other Hazards : No additional Information

Unknown Acute Toxicity : No data available

Hazard(s) not otherwise classified (HNOC): None Known.

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component *	Percent
Mixture	Blend of plant nutrients, derived from: Urea and Aqua Ammonia, Phosphoric acid, Potassium Nitrate, Water, Humic acid & Fulvic acid. Chlorene percentage is 0.3%	100.00%*

Individual Fertilizer Component Information

CAS #	Component	Hazard	Percent Range
7664-41-7	Ammonium Hydroxide	Corrosive to eyes/skin. Severe Inhalation Irritant	1-5
57-13-6	Urea	Skin and inhalation irritant	1-5
7664-38-2	Phosphoric acid, P ₂ O ₅	Corrosive/burns when inhaled and in contact/eyes/skin	4.0
7757-79-1	Potassium Nitrate, K ₂ O	Contact with combustible material may cause fire	2-6
1415-93-6	Humic acid		2.0
479-66-3	Fulvic acid		0.2

*Proprietary components are Trade Secret Information and information on those components, if needed by medical authority or regulatory authority are available by calling the emergency number in Section 1 of this SDS

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*** Section 4 - First Aid Measures ***

Description of First Aid Measures

- First-aid measures general** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation** : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.
- First-aid measures after skin contact** : Wash with plenty of soap and water. Remove and wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label).
- First-aid measures after eye contact** : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion** : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important Symptoms both acute and delayed

- Symptoms/injuries after inhalation** : May cause respiratory irritation.
- Symptoms/injuries after skin contact** : Causes skin irritation.
- Symptoms/injuries after eye contact** : Causes eye irritation.

*** Section 5 - Fire Fighting Measures ***

- Extinguishing media** : Use fire extinguishing media appropriate for surrounding materials. Water, spray, foam, dry powder or carbon dioxide.
- Specific Hazards Arising from the from the chemical** : This material is non-combustible. If heated, corrosive and toxic vapors/gasses/mists may be formed. Hazardous combustion products include ammonia and phosphorous oxides.
- Firefighting Instructions**
- Advice for firefighters** : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting** : Do not enter fire area without proper protective equipment, including respiratory protection.

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*** Section 6 - Accidental Release Measures ***

- Personal Precautions** : Avoid inhalation of vapors, especially if there is a fire.
- Containment Procedures** : Contain spill. Do not allow material to run into sewers and drains.
- Clean-Up Procedures** : Absorb spill with inert material. Shovel material into appropriate labeled, container for disposal. Flush small residuals to the drain for normal biological treatment.
- Evacuation Procedures** : None required.
- Special hazards arising from the substance or mixture** : This material is non-combustible. If heated, corrosive and toxic vapors. vapors/gases may be formed, which include ammonia, phosphorous oxides.

*** Section 7 - Handling and Storage ***

- Handling Procedures** : Avoid contact with eyes, skin and clothing. Avoid breathing vapors, spray or mists. Ensure here is access to eyewash and showers in the manufacturing area close to the workstation location.
- Storage Procedures** : Keep containers tightly closed. Store in a cool, well ventilated area. Do not freeze. Keep away from heat and direct sunlight.

*** Section 8 - Exposure Controls / Personal Protection ***

General protective and hygienic measures:

- The usual precautionary measures for handling chemicals should be followed:
- Keep away from foodstuffs. Beverages and feed.
 - Immediately remove all soiled and contaminated clothing and wash before reuse.
 - Store protective clothing separately.
 - Avoid contact with eyes and skin.
 - Use tightly sealed goggles.
 - Use protective gloves.
 - Avoid breathing of dusts/vapors/mists: Use appropriate breathing apparatus.

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Section 8 Exposure Controls/Personal Protection for Some Component hazards Continued.

Ammonium Hydroxide / 1336-21-6 39.1% 25 ppm TWA 35 ppm STEL 50 ppm PEL 300 ppm IDLH

Urea 57-13-6 is treated by OSHA as a Nuisance Dust "Particulate Not Otherwise Classified"
OSHA PEL TWA 5mg/m³
ACGIH TWA 10mg/m³

Phosphoric acid 7664-38-2 ACGIH/TLV 1mg/m³ OSHA/PEL 3 mg/m³ Corrosive. Causes severe irritation and burns to every area of contact.

*** Section 9 - Physical & Chemical Properties ***

Form : Liquid
Odor/Appearance : Dark amber liquid..
Flash Point : Not applicable.
Boiling Point, °F : >100°C (212°) F.
Melting point (freezing point) : <1.2°C (34F)
Vapor Pressure, mm Hg @ 200°C : N/A Mixture
Vapor Density : N/A
Solubility in water : 100%
Product Weight : 9.52 lbs/gal.
Evaporation Rate (butyl acetate=1) : Not determined.
Octanol/Water Partition Coefficient : Not applicable
pH : Not available
Flammable Limits (approx. volume % in air) : Not applicable.
Auto-Ignition Temperature : Not applicable.
Decomposition temperature : >200°C
VOC's : Not Applicable.
Viscosity : Not determined

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*** Section 10 - Chemical Stability & Reactivity Information ***

- Reactivity** : None.
Chemical Stability : None.
Hazardous Decomposition Product : Ammonia gas and phosphorous oxides may be produced under fire conditions.
Hazardous Polymerization : Will not occur
Conditions to Avoid : None known.
Incompatible Materials : Strong bases. Strong acids

*** Section 11 - Toxicological Information ***

LC/LD 50 Values that are relevant for classification

Acute Toxicity :

Component Derivation Toxicity

- Ammonium Hydroxide** : CAS # 7664-41-7; Oral Toxicity-LD₅₀, rat: >350mg/kg; 90 ml/kg.
Phosphoric acid : CAS # 7664-38-2; Oral toxicity-LD₅₀rat: 1530; Dermal: 2750, rabbit.
Urea : CAS # 57-13-6; Oral toxicity-LD₅₀ rat: 8751mg/kg.

- Likely Routes of Entry** : Skin, eyes, inhalation
Skin Irritation : Slightly Irritating
Eye Irritation : Not available, suspect mild to minimally irritating.
Skin Sensitization : Not available, suspect mild irritation.
Carcinogenic : None currently known.
Chronic Effects : None currently known.
Other Hazards : None currently known.

*** Section 12 - Ecological Information ***

- Ecotoxicity** : No data available
Persistence and Degradability : No data available
Bioaccumulative Potential : No data available
Mobility in Soil : No data available
Other Adverse Effect : Keep out of waterways.

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*** Section 13 - Disposal Considerations ***

Waste Disposal Methods : Any unused product, waste or cleaned up spill must be absorbed and/or properly labeled in a container and disposed of according to Federal, State or Local procedures under the Resource Conservation Act.

Container Disposal : Triple rinse (or equivalent) any container, then puncture and dispose of in a sanitary landfill or incineration (if allowed by state and local authorities) by burning.

*** Section 14 - Transportation Information ***

UN – Number:

DOT, ADR, ADN, IMDG, IATA: Not Regulated Material

UN-Proper shipping name:

DOT, ADR, ADN, IMDG, IATA: Not Regulated Material

Transport Hazard Classes;:

DOT, ADR, ADN, IMDG, IATA: Not Regulated Material

Packing group:

DOT, ADR, ADN, IMDG, IATA: Not Regulated Material

Environmental hazards: Not applicable

Special precautions for user: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not Applicable

UN “Model Regulation”: Not regulated.

Transportation Freight Classification; Fertilizing Compound, (Manufactured Fertilizer), NOIBN; LIQUID (NMFC Item 68140, Sub 6, Class 70)

Harmonized Systems Code : (HS CODE) 3105.20.00 Mineral or Chemical Fertilizers Containing Nitrogen, Phosphorus & Potassium.

*** Section 15 - Regulatory Information ***

Notification status:

TSCA; DSL; AICS: Yes – All chemical substances and components are on these lists.

SARA 304 – This material does not contain any components with a 304 EHS RQ.

SARA 311/312 Hazards – Acute health hazard.

SARA 302 – None of the ingredients are listed.

SARA 313 – (Specific toxic chemical listings): None of the ingredients are listed.

SARA 355 – (extremely hazardous substances): None of the ingredients are listed.

California Proposition 65; chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.

Chemicals known to cause developmental toxicity: None of the ingredients are listed.

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Carcinogenic categories:

EPA (Environmental Protection Agency): None of the ingredients are listed.

TLV (Threshold Limit Values set by ACGHI): None of the ingredients are listed.

NIOSH-CA (National Institute for Occupational Safety & Health: None of the ingredients are listed.

U.S. –New Jersey-Right to Know

Hazardous Substance List : Potassium Nitrate: (7757-79-1)

GHS Elements:

This product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard Pictogram:



Signal Word: WARNING

See Section 2 for Hazard Statements and Precautionary Statements

National Regulations: The product is subject to be classified according with the latest versions of the regulations on hazardous substances.

*** * * Section 16 - Other Information * * ***

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

This is a new SDS.

This is the end of SDS