



Material Safety Data Sheet

MacroGro™ 2400 Wastewater Nutrient Blend

Environmental Business Specialists, LLC
P.O. Box 1936 • Mandeville, LA 70470-1936
Phone: 985-674-0660 • Fax: 985-674-3483
E-mail: foster@ebsbiowizard.com
Website: www.ebsbiowizard.com

Effective date of MSDS: 05-16-08

Emergency Phone: 1-800-424-9300
(CHEMTREC)

Product Identification

Chemical Name: Urea Ammonium Nitrate
Trade Name: MacroGro 2400
Chemical Family: Wastewater Nutrient
Chemical Formula: CH₄ON₂ and NH₄NO₃
CAS Number: 6484-52-2

Physical Data

Boiling Point: 225° F
Specific Gravity: 1.33
Density: 11.06 lbs/gal @ 60F
Vapor Pressure: >1.0 at 100F
Evaporation Rate: Approximately equal to water
Solubility in Water: Complete
Appearance: Light green to amber liquid
Odor: Slight ammonia odor

Exposure Guidelines

For free ammonia, the TWA is 25 ppm, the STEL is 35 ppm and the PEL is 50 ppm.

Fire and Explosion Hazard Data

Flash Point: N/A
Flammable Limits: N/A
Extinguishing Media: N/A
Special Fire Fighting Procedures: N/A
Unusual Fire and Explosion Hazards: None

Reactivity Data

Stability: Stable
Incompatibility: Chlorine and hypochlorites
Hazardous Polymerization: Will not occur
Conditions to Avoid: Not applicable
Hazardous Decomposition Products: Ammonia and oxides of nitrogen.

Environmental and Disposal Information

Action to take for leaks and spills: MacroGro 2400 is a nutrient. If large spill contaminate waterways, it may promote eutrophication and cause fish kills. If drinking water is contaminated above 10 mg/l, it should be reported to the proper authorities.

Disposal Method: If uncontaminated, recover and reuse. Consult state or federal regulatory agencies for acceptable disposal procedures and disposal locations.

Reportable Quantity: None established

Health and Hazard Data

Eyes: Contact with eyes may cause irritation.

Skin: Contact with skin may cause irritation.

Ingestion: Small repeated doses may lead to weakness, general depression, headache and mental impairment. 10 to 15 grams may have serious or fatal effects.

Respiratory: Can cause irritation. Systemic effects are not likely.

Emergency and First Aid Procedures

Eyes: Immediately flush with water, preferably cold, for at least 20 minutes. If irritation persists, seek medical attention.

Skin: Remove contaminated clothing. Wash off in flowing water or shower. Seek medical attention, if irritation develops.

Ingestion: Do not induce vomiting. Dilute with water and seek medical attention.

Respiratory: Generally not considered an inhalation hazard. If irritation develops, move patient to fresh air and monitor.

Personal Safety Equipment and Handling Procedures

Ventilation: Maintain adequate ventilation to keep exposure below exposure guidelines

Respiratory: Normally, none required. However, since MacroGro 2400 contains some free ammonia, can be used in vapors up to 300 ppm. If ammonia can be smelled through the mask, safe levels have been exceeded.

Skin: Normally none required, but minimize skin contamination by using good industrial practices. If irritation occurs, wear chemical resistant rubber or other protective gloves.

Eyes: Safety glasses with splash guards, monogoggles, or face shield.

Other: A safety shower and eye wash should be provided in the area where MacroGro 2400 is stored and handled.

Regulatory Information

SARA 313 Information: This product contains the following substances subject to reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR, Part 372:

Ammonia (CAS # 766-41-7) 9.89% by weight

Nitrate compounds (CAS# NA) 35.87% by weight

Additionally, the following regulations apply to this product: SARA Title III, Sections 311 and 312 (40 CFR 370)

TSCA: All ingredients are on the TSCA Inventory, or are not required to be listed on the TSCA Inventory.

Disclaimer

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