

MATERIAL SAFETY DATA SHEET

Total Solutions
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GENERAL INFORMATION NUMBER: (414) 354-6417
CHEMTREC: (800) 424-9300

REVISION DATE: September 18, 2003
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I - Product Identification

Liquid Fertilizer 20-2-3

PRODUCT CODE: 0242

CHEMICAL FORMULATION: Liquid fertilizer.

NFPA HAZARD IDENTIFICATION SYSTEM:

HAZARD RATING:

4 - Extreme;

HEALTH: 1

3 - High;

FLAMMABILITY: 0

2 - Moderate;

1 - Slight;

REACTIVITY: 0

0 - Insignificant

II - Hazardous Ingredients

Values reported as TWA unless noted.

<u>SUBSTANCE</u>	<u>APPROX</u>	<u>OSHA</u>	<u>ACGIH</u>	<u>EPA 40 CFR:</u>			<u>CAS #</u>
	<u>%</u>	<u>PEL</u>	<u>TLV</u>	<u>302</u>	<u>355</u>	<u>372</u>	
Total Nitrogen	20.0	N/E	N/E	N	N	N	
Available Phosphate	2.00	N/E	N/E	N	N	N	
Soluble Potash	3.00	N/E	N/E	N	N	N	

Key: **PEL:** Permissible Exposure Limit **TLV:** Threshold Limit Value **C:** Ceiling level **STEL:** Short Term Exposure Limit
N/A: Not Applicable **N/D:** Not Determined **N/E:** Not Established **Y:** Yes **N:** No
302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).
355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).
372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

III - Physical Data

BOILING POINT (°F): > 200

SPECIFIC GRAVITY (WATER = 1): 1.202

VAPOR PRESSURE (mm Hg): N/D

VOC CONTENT (% by weight): N/D

VAPOR DENSITY (AIR = 1): N/D

EVAPORATION RATE (WATER = 1): N/D

SOLUBILITY IN WATER: Soluble

pH: 6.00-7.00

APPEARANCE AND ODOR: Clear, aqua blue to faint green liquid; slight odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): None

(TEST METHOD): N/A

FLAMMABLE LIMITS IN AIR (VOLUME %)

UPPER: N/A

LOWER: N/A

EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Fire may produce hazardous fumes. Firefighters should be equipped with full protective gear including self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARD: None.

V - Reactivity Data

STABILITY: Stable**INCOMPATIBILITY:** Strong alkalis or acids and calcium.**CONDITIONS TO AVOID:** None**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce oxides of carbon.**HAZARDOUS POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** None

VI - Health Hazard Data

ROUTES OF ENTRY **INHALATION:** X **EYE CONTACT:** X **SKIN CONTACT:** X **INGESTION:** X**INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS:** None.**EFFECTS OF OVEREXPOSURE****IF IN EYES:** Corrosive. May cause severe irritation, burns, tearing.**IF ON SKIN:** Irritation with prolonged or repeated exposure.**IF SWALLOWED:** May cause nausea, vomiting, diarrhea and gastric distress.**IF INHALED:** Irritation of respiratory tract.**EMERGENCY AND FIRST AID PROCEDURES****IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.**IF ON SKIN:** Remove contaminated clothing and launder before re-use. Wash with soap and water. If irritation persists, obtain medical attention.**IF SWALLOWED:** Contact physician or poison control center immediately. Give affected person large amounts of water. Do not induce vomiting unless instructed by a physician or poison control center. Never give anything by mouth to an unconscious person.**IF INHALED:** Remove person to fresh air. If breathing has stopped, administer artificial respiration.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area. Soak up spilled material with inert absorbent material or flush away with water.**WASTE DISPOSAL METHOD:** Consult local environmental authorities.

VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation. Do not breathe mists. If mists are generated wear a NIOSH approved respirator, following manufacturer's recommendations.**VENTILATION****LOCAL:** Not required**MECHANICAL:** Not required**PROTECTIVE GLOVES:** Chemical resistant.**EYE PROTECTION:** Safety glasses or chemical goggles.**OTHER PROTECTIVE EQUIPMENT:** Eye wash station.**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place. Keep container tightly closed when not in use.**OTHER PRECAUTIONS:** Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT PROPER SHIPPING NAME: None**DOT CLASS:** None**DOT ID NUMBER:** None**DOT PACKING GROUP:** None

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

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