

MATERIAL SAFETY DATA SHEET



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SECTION I. MATERIAL IDENTIFICATION

| | | | |
|-------------------------|---|--------------------|-------------------------|
| CHEMICAL NAME | nitrogen, phosphorus, potassium | TRADE NAME: | N-P-K mixed liquids |
| AND SYNONYMS: | mixed fertilizer solution, slow release nitrogen solution, controlled release nitrogen, NACHURS SRN | SYNONYMS: | starter fertilizer |
| CHEMICAL FAMILY: | inorganic salt | FORMULA: | fertilizer salt complex |

SECTION II. INGREDIENTS AND HAZARDS

Contains no hazardous components as per 29 CFR 1910.100 (Subpart Z)

SECTION III. PHYSICAL DATA

| | | | |
|---|--|--|------|
| SPECIFIC GRAVITY (H₂O = 1): | 1.30 | POUNDS N/GALLON: | 2.48 |
| DENSITY, lbs/gal | 10.8 | POUNDS P₂O₅/GALLON: | 0.43 |
| WATER SOLUBILITY: | complete | POUNDS K₂O/GALLON: | 0.22 |
| pH: | 6.5-8.5 | | |
| APPEARANCE AND ODOR: | Clear to translucent, nearly colorless liquid, nearly odorless | | |

SECTION IV. FIRE AND EXPLOSION DATA

| | LOWER | UPPER |
|--|-------|-------|
| FLASH POINT AND METHOD: N/A | N/A | N/A |
| AUTOIGNITION TEMP: N/A | | |
| FLAMMABILITY LIMITS IN AIR: N/A | | |

EXTINGUISHING MEDIA: N-P-K solutions are non-flammable. If involved in a fire, use water or media suitable for surrounding materials.
SPECIAL FIRE FIGHTING PROCEDURES: none
UNUSUAL FIRE AND EXPLOSION HAZARDS: none

SECTION V. HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE: N-P-K solutions are considered to be low health hazards

FIRST AID:

Eye Contact: Flush eyes immediately and thoroughly with water for at least 15 minutes. If irritation persists, seek medical attention.
Skin Contact: Flush skin immediately and thoroughly with water. If irritation persists, seek medical attention.
Inhalation: Generally not considered an inhalation hazard.
Ingestion: If conscious, immediately give large quantities of water and induce vomiting. Seek medical attention immediately.

SECTION VI. REACTIVITY DATA

| | | | |
|-------------------|-----------|-----------|--|
| STABILITY: | Stable: X | Unstable: | CONDITIONS TO AVOID: when heated may give off ammonia gas |
|-------------------|-----------|-----------|--|

INCOMPATIBILITY: water-reactive materials

HAZARDOUS DECOMPOSITION PRODUCTS: ammonia

| | | | |
|---------------------------------|------------|-------------------|-----------------------------|
| HAZARDOUS POLYMERIZATION | May occur: | Will not occur: X | CONDITIONS TO AVOID: |
|---------------------------------|------------|-------------------|-----------------------------|

SECTION VII. SPILL, LEAK AND DISPOSAL PROCEDURES

SPILLS, LEAKS: Since N-P-K is a fertilizer, it may promote eutrophication in waterways. In the case of a spill, contain spill and maximize recovery. Mop up or pump up promptly in suitable containers.

WASTE DISPOSAL METHOD: Disposal of N-P-K fertilizer may be subject to federal, state and local regulations. Users of this product should review their operations in terms of applicable federal, state, and local laws and regulations, then consult with appropriate regulatory agent before discharging or disposing.

SECTION VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Respirators are not required under normally ventilated conditions. If heated to evolve ammonia, use appropriate protection. If misted by heat, agitation or spray, use a mist respirator approved by NIOSH. Do not use single-use type.

| | | |
|---------------------|---|-----------------|
| VENTILATION: | LOCAL EXHAUST: adequate | SPECIAL: |
| | MECHANICAL: only if heated or misted | OTHER: |

PROTECTIVE GLOVES: rubber gloves

EYE PROTECTION: safety glasses and face shield are recommended

OTHER PROTECTIVE EQUIPMENT AND PRECAUTIONS: not generally required

SECTION IX. SPECIAL PRECAUTIONS AND COMMENTS

STORAGE AND HANDLING INFORMATION:

Storage is suitable in the following containers: HDPE (high density polyethylene), FG (fiber glass), FRP (fiberglass reinforced plastic), stainless steel. This product is heavier than water. Storage container will need to accommodate the fertilizer weight per gallon.

OTHER PRECAUTIONS: Always follow good industrial hygiene practices.

HAZARD RATING (N.F.P.A.):


| | |
|--------------------|---|
| HEALTH: | 1 |
| FIRE: | 0 |
| REACTIVITY: | 0 |
| SPECIFIC: | 0 |

This N.F.P.A. rating is a recommendation by the manufacturer using the guidelines or published evaluations prepared by the National Fire Protection Association (N.F.P.A.)

DOT CLASS: N/A

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Signature: _____



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