



MATERIAL SAFETY DATA SHEET

REVISION DATE: 07/11/2011
DATE PRINTED: 07/11/2011

REVISION NUMBER: 3 **PREPARED BY:** EH&S DEPARTMENT

1. CHEMICAL PRODUCT

PRODUCT NAME: PHOS-TEC 2818

PRODUCT CODE: 118351

NFPA/HMIS HAZARD CODES(minimal=0; slight=1; moderate=2; serious=3; severe=4)

Health: 2/2
Reactivity: 0/0

Fire: 0/0
Special/Protective Equipment: Acid

**NAME OF THE
MANUFACTURER:**

2. HAZARDS IDENTIFICATION

EFFECTS FROM ACUTE EXPOSURE:

INGESTION:	May cause severe damage of gastrointestinal tract. May cause kidney damage. Aspiration can be a hazard if this material is swallowed.
SKIN CONTACT:	Causes severe burns. Prolonged contact can cause skin damage.
INHALATION:	Can cause damage to mucous membranes of nose, throat, respiratory tract and lung tissue depending on severity of exposure.
EYE CONTACT:	Corrosive to eye tissue and may cause severe damage and blindness.
CHRONIC EFFECTS:	Prolonged contact may cause dryness and irritation. Repeated overexposure may cause damage to liver, kidney, and red blood cells.
EFFECTS/CARCINOGENICITY:	None listed under OSHA, IARC, or NTP.
ROUTES OF ENTRY:	Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION CAS#	%	ACGIH TLV	OSHA PELs
Ammonium Phosphate, Monobasic 7722-76-1	10 - 20	Not applicable	Not applicable
Ethylene glycol butyl ether 111-76-2	1 - 5	20 ppm	240 mg/m ³ 50 ppm
Hydrofluoric acid 7664-39-3	< 1	0.5 ppm	3 ppm

4. FIRST AID MEASURES

INGESTION: DO NOT INDUCE VOMITING. Drink promptly a large quantity of water, egg white, or gelatin solution. Get immediate medical attention. Never give anything by mouth to an unconscious person.

SKIN: Wash with soap and water. Remove contaminated clothing and discard. Get medical attention if irritation persists.

INHALATION: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Aid in breathing, if necessary, and get immediate medical attention.

4. FIRST AID MEASURES

EYES: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

NOTES TO PHYSICIAN: None.

5. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (F): None (C): None

METHOD: TCC

FLAMMABLE LIMITS IN AIR

LOWER (%):	No data
UPPER (%):	No data

SENSITIVITY TO MECHANICAL IMPACT(Y/N): NO

SENSITIVITY TO STATIC DISCHARGE: Sensitivity to static discharge is not expected.

SUITABLE EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam, dry chemical.

FIRE FIGHTING PROCEDURES: Cool exposed containers with water spray. Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

6. ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES:

SMALL SPILLS: Reclaim as much as possible. Flush residue with water.

LARGE SPILLS: Reclaim as much as possible. Shovel or sweep up residue and place in suitable containers.

PERSONAL PRECAUTIONS: Not applicable

ENVIRONMENTAL PRECAUTIONS: Not applicable

METHODS FOR CLEANING UP: Not applicable

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

DANGER: Mildly acidic liquid. Avoid contact with skin and eyes. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Wash thoroughly after handling. Store in a cool, dry area.

OTHER PRECAUTIONS:

Keep container closed when not in use.

Empty containers may retain product residue, follow MSDS/label precautions even after container is emptied.

SPECIFIC USE(S):

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT:



EXPOSURE CONTROLS:

None known.

RESPIRATORY PROTECTION:

Use approved NIOSH respiratory protection if TLV/PEL exceeded or if over exposure is likely.

PROTECTIVE GLOVES:

Nitrile, neoprene, or other appropriate gloves are recommended to minimize hand skin contact.

EYE PROTECTION:

Goggles and face shield are recommended to minimize eye contact.

OTHER PERSONAL PROTECTION EQUIPMENT:

Appropriate protective clothing as needed to prevent skin contact. Eyewash fountains and safety showers must be easily accessible. It is the responsibility of the end user of this product to determine level of PPE required that is consistent with safe use of this product.

VENTILATION:

Adequate ventilation should be provided to keep dust concentrations below acceptable exposure limits. Discharge from the ventilation system should comply with the applicable air pollution control regulations. Eliminate ignition sources.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Mild odor. Clear, colorless liquid.	
BOILING POINT (F):	>212° F	(C) > 100° C
VAPOR PRESSURE:	Not determined	
VAPOR DENSITY (AIR=1):	> 1	
SOLUBILITY IN WATER:	Complete	
SPECIFIC GRAVITY:	1.130 - 1.150	
VOC Content (%):	Not determined	
EVAPORATION RATE:	Not determined	
PH:	3.7 - 5.20	

10. STABILITY AND REACTIVITY

STABILITY DATA:	STABLE
POLYMERIZATION:	Will Not Occur.
HAZARDOUS DECOMPOSITION:	Oxides of Carbon. Oxides of Nitrogen. Carbon Monoxide. Carbon Dioxide.
INCOMPATIBILITY (MATERIALS TO AVOID):	Avoid contact with: Bases, such as caustic soda, bleach, ammonia, etc. Alkalines. Avoid contact with aluminum, zinc, other soft metals or galvanized metals.
CONDITIONS/HAZARDS TO AVOID:	Extreme heat, direct sunlight.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:	Not Established
EFFECTS OF CHRONIC EXPOSURE:	Not established.
OTHER TOXIC EFFECTS:	Not established.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:	No data at this time
CHEMICAL FATE INFORMATION:	No data at this time.
MOBILITY:	Not applicable.
PERSISTENCE/DEGRADABILITY:	Not applicable
BIOACCUMULATIVE POTENTIAL:	Not applicable
OTHER ADVERSE EFFECTS:	Not applicable

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS:	Dispose in accordance with Federal, State and Local regulations.
-------------------------	--

14. TRANSPORT INFORMATION

Please refer to the Bill of Lading/Receiving documents for up to date shipping information.

15. REGULATORY INFORMATION

PRODUCT COMPOSITION CAS#	%	TSCA:	EINECS:	Canada DSL:	CA PROP 65:
Ammonium Phosphate, Monobasic 7722-76-1	10 - 20	Not Listed	Not Listed	Not Listed	Not Listed
Ethylene glycol butyl ether 111-76-2	1 - 5	Listed	Listed	Listed	Not Listed
Hydrofluoric acid 7664-39-3	< 1	Listed	Not Listed	Listed	Not Listed

PHOS-TEC 2818

PRODUCT COMPOSITION CAS#	%	CERCLA:	SARA 302:	SARA 313:
Ammonium Phosphate, Monobasic 7722-76-1	10 - 20	Not Listed	Not Listed	Not Listed
Ethylene glycol butyl ether 111-76-2	1 - 5	Not Listed	Not Listed	Not Listed
Hydrofluoric acid 7664-39-3	< 1	100 lb 45.4 kg	100 lb RQ = 100 lb TPQ	= 1.0 % de minimis concentration

PRODUCT COMPOSITION CAS#	%	Canada WHMIS:
Ethylene glycol butyl ether 111-76-2	1 - 5	Listed
Hydrofluoric acid 7664-39-3	< 1	Listed

The following components of this material are included in the Massachusetts Substance List and are present at or above reportable levels.

PRODUCT COMPOSITION CAS#	%	MARTK:
Ethylene glycol butyl ether 111-76-2	1 - 5	Listed
Hydrofluoric acid 7664-39-3	< 1	Listed

The following components of this material are included in the New Jersey Substance List and are present at or above reportable levels.

PRODUCT COMPOSITION CAS#	%	NJRTK:
Ethylene glycol butyl ether 111-76-2	1 - 5	Listed
Hydrofluoric acid 7664-39-3	< 1	Listed

The following components of this material are included in the Pennsylvania Substance List and are present at or above reportable levels.

PRODUCT COMPOSITION CAS#	%	PARTK:
Ethylene glycol butyl ether 111-76-2	1 - 5	Listed
Hydrofluoric acid 7664-39-3	< 1	Listed

16. OTHER INFORMATION

This information was compiled from current, reliable sources and is believed to be correct. As data, and/or regulations change, and conditions of use and handling are beyond our control, no warranty, express or implied, is made as to completeness or continuing accuracy of this information.

*** END OF MSDS ***