KEMAPCO[®]

MATERIAL SAFETY DATA SHEET

Rev. A

Section 1. Identification Of The Substance

Chemical Name :				
Trade Name :				
Common Name :				
Chemical Family :				
Formula :				

KNO₃ and NH₄H₂PO₄ NPK Fertilizer 13-3-43 N.P.K **Ternary Mixed Mineral Fertilizer** 13.3.43

Section 2. Composition/Information On Ingredients

Substance/mixture					
Ingredient name	Chemical name	CAS number	%Formula		
NOP(KNO3)	Potassium nitrate	7757-79-1	94.5%		
MAP(NH4H2PO4)	Mono-Ammonium Phosphate	7722-76-1	5.5%		
total Insoluble :			< 0.05%		

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

pH Value : 4.0-7.0 Section 4.First Aid Measures Ingestion: Do not induce vomiting Eye : flush with water . flush with water . Skin : flush with water . Inhalation: Remove to fresh air . For all emergency cases, it is advisable to get medical attention . Section 5. Fire Fighting Measures Flammability : Not flammable Extinguishing media : Carbon dioxide, Dry chemical, Water spray or fog, as suitable to extinguishing surrounding fire. Special fire fighting methods : Use self contained breathing apparatus . Special fire fighting methods : Use self contained breathing apparatus . Special fire fighting and storage : Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Boiling point : <	Section 3. Physical DATA					
Section 4.First Aid Measures Ingestion: Do not induce vomiting Eye: flush with water . Shin: flush with water . Inhalation: Remove to fresh air . For all emergency cases, it is advisable to get medical attention . Section 5. Fire Fighting Measures Flammability: Not flammable Extinguishing media: Carbon dioxide, Dry chemical, Water spray or fog, as suitable to extinguishing surrounding fire. Special fire fighting methods: Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 9. Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Density (20°C) Not Applicable	Water Solubility :	Highly Soluble 99.5% at 25 °C				
Ingestion: Do not induce vomiting Eye : flush with water . Skin : flush with water . Inhalation: Remove to fresh air . For all emergency cases, it is advisable to get medical attention . Section 5. Fire Fighting Measures Flammability : Not flammable Extinguishing media : Carbon dioxide, Dry chemical, Water spray or fog, as suitable to extinguishing surrounding fire. Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9. Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	pH Value :	4.0-7.0				
Eye : flush with water . Skin : flush with water . Inhalation: Remove to fresh air . For all emergency cases, it is advisable to get medical attention . Section 5. Fire Fighting Measures Flammability : Not flammable Extinguishing media : Carbon dioxide, Dry chemical, Water spray or fog, as suitable to extinguishing surrounding fire. Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable <	Section 4.First Aid Measures					
Skin : flush with water . Inhalation: Remove to fresh air . For all emergency cases, it is advisable to get medical attention . Section 5. Fire Fighting Measures Flammability : Not flammable Extinguishing media : Carbon dioxide, Dry chemical, Water spray or fog, as suitable to extinguishing surrounding fire. Special fire fighting methods : Use self contained breathing apparatus . Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flah point : Non-flammable Density (20°C) Not Applicable	Ingestion:	Do not induce vomiting				
Inhalation: Remove to fresh air . For all emergency cases, it is advisable to get medical attention . Section 5. Fire Fighting Measures Flammability : Not flammable Extinguishing media : Carbon dioxide, Dry chemical, Water spray or fog, as suitable to extinguishing surrounding fire. Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Eye :	flush with water .				
For all emergency cases, it is advisable to get medical attention . Section 5. Fire Fighting Measures Flammability : Not flammable Extinguishing media : Carbon dioxide, Dry chemical, Water spray or fog, as suitable to extinguishing surrounding fire. Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Skin :	flush with water .				
Section 5. Fire Fighting Measures Flammability : Not flammable Extinguishing media : Carbon dioxide, Dry chemical, Water Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Flash point : Non-flammable	Inhalation:	Remove to fresh air .				
Flammability : Not flammable Extinguishing media : Carbon dioxide, Dry chemical, Water Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable	For all emergency cases, it is advisable to get medical attention .					
Extinguishing media : Carbon dioxide, Dry chemical, Water spray or fog, as suitable to extinguishing surrounding fire. Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Section 5. Fire Fighting Measures					
spray or fog, as suitable to extinguishing surrounding fire. Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Flash point : Non-flammable Ponsity (20°C) Not Applicable	Flammability :					
Special fire fighting methods : Use self contained breathing apparatus . Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Extinguishing media :	Carbon dioxide, Dry chemical, Water				
Special Hazards: At exposure to high temperature it may decompose and release toxic gases. Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Density (20°C) Not Applicable		spray or fog, as suitable to extinguishing surrounding fire.				
Reacts with combustible materials and increases combustion. Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Ponsity (20°C) Not Applicable	Special fire fighting methods :	Use self contained breathing apparatus .				
Section 6. Accidental Release Measures Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : Boiling point : Ignition point : Flash point : Density (20°C) Non-flammable Not Applicable	Special Hazards: At exposure to high temperature it may decompose and release toxic gases.					
Clean the site with water . Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : Mhite color Boiling point : Ignition point : Plash point : Non-flammable Flash point : Non-flammable Non-flammable Non-flammable	Reacts with combustible materials and increases combustion.					
Section 7. Handling and Storage : Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Section 6. Accidental Release Measures					
Store in original container in a fresh and dry place , away from direct heat and sunlight . Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Clean the site with water .					
Section 8. Exposure control / personal protection Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Section 7. Handling and Storage :					
Applicators and other handlers don't need special requirements , We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Store in original container in a fresh and dry place , away from direct heat and sunlight .					
We recommend the use of a gloves , dust mask , safety goggles . Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Section 8. Exposure control / personal protection					
Section 9.Physical and Chemical Properties Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Applicators and other handlers don't need special requirements ,					
Appearance : White color Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	We recommend the use of a gloves , dust m	nask , safety goggles .				
Boiling point : Decomposes on heating above 197C Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Section 9.Physical and Chemical Properties					
Ignition point : Non-flammable Flash point : Non-flammable Density (20°C) Not Applicable	Appearance :	White color				
Flash point : Non-flammable Density (20°C) Not Applicable	Boiling point :					
Density (20°C) Not Applicable	Ignition point :	Non-flammable				
	Flash point :	Non-flammable				
Corrosion : Non-corrosive	Density (20°C)	Not Applicable				
	Corrosion :	Non-corrosive				



Section 10.Stability a	ind Reactivity		
Chemical Stability :	Stable at normal temperatures and storage condition		
Condition to avoid :	Extremely heat and direct sunlight		
Material to avoid :	Reducing agent, flammable materials, combustibles.		
Polymerization :	Polymerization will not occur , in the pure material		
Section 11.Toxicologi	ical Information		
Not Toxic			
Section 12.Ecological	Information		
Biodegradability:	The product is	biodegradable.	
Ecological and biolog	zical effects: None		
Section 13.Disposal Ir	nstruction		
The product should b	pe recycled		
Section 14.Transport	Information		
UN code:	1479		
IMO:	5.1		
HS code:	31052000		
Section 15.Special Pro	otection Information		
Respiratory Protectio	on : Not volatile, du	st mask should be used in case of dusty material.	
Eye Protection :	Eye Protection : Use safety Goggles		
Other protective equi	ipment and precautions , wear poly propylene glo	ves	

Proper use is as agricultural Fertilizer only.

Disclaimer

This information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environment requirements only. However the supplier does not assume any liability what so ever for the accuracy and completeness of information contained herein. It should not therefore be construed as guaranteeing any specific property of the product. DISCLAIMER OF LIABILITY The information in this MSDS was obtained from sources which we believe are reliable. However the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. Final determination of the suitability of any material is the sole responsibility of the user . Although certain hazards are described herein we can not guarantee that these are the only hazards that exist. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use, disposal of the product.

Issued by:

Arab Fertilizers & Chemicals Industries Ltd. (KEMAPCO®) P.O.BOX 2564 Aqaba 77110 Jordan TEL.: +96232017174 FAX: +96232017181 E-mail : kemapco@kemapco.com.jo

COMPANY WITH QUALITY SYSTEM CERTIFIED BY SGS =ISO 9001=



