

MATERIAL SAFETY DATA SHEET

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NPK-20-20-20 LIQUID FERTILIZER ID NUMBER: NPK SERIES PRODUCT USE/CLASS:
PLANT FOOD

MANUFACTURER: EST, INC. 15785 S. KEELER TERR. OLATHE, KANSAS 66062

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PREPARER: REGULATORY COMPLIANCE

PREPARE DATE: 11-03-14

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	WT. PERCENT IS LESS THAN	TLV-TWA	TLV-STEL	PEL-TWA
AMMONIUM PHOSPHATE	7722-76-1	PROPRIETARY	NA	NA	NA
AMMONIUM NITRATE	6484-52	PROPRIETARY	NA	NA	NA
UREA SOLUTION	5057-13-6	PROPRIETARY	NA	NA	NA
AMMONIUM HYDROXIDE	1336-21-6	PROPRIETARY	NA	NA	NA
POTASSIUM SULFATE	7778-80-5	PROPRIETARY	NA	NA	NA
HYDROGEN HYDROXIDE	7732-18-8	PROPRIETARY	NA	NA	NA

No Hazardous Materials are contained in this Product
(See Section XI for abbreviation legend)

SECTION III - PHYSICAL DATA

BOILING RANGE: 212°F TO 220* VAPOR DENSITY: (AIR=1) APPROXIMATELY 1.07g/l AT 59°F(30% UREA)
ODOR: SLIGHT EARTHY ODOR SPECIFIC GRAVITY: (H2O=1) 1.28 AT 60°F (HEAVIER THAN WATER)
APPEARANCE: LIGHT TO DARK BROWN COLOR EVAPORATION RATE: NA SOLUBILITY IN H2O: DISPERSIBLE
PH: 6.5 TO 7.5

(See Section XI for abbreviation legend)

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: NA LOWER EXPLOSIVE LIMIT: N.A UPPER EXPLOSIVE LIMIT: N.A.
(TAGLIABUE CLOSED CUP)

EXTINGUISHING MEDIA: ALCOHOL FOAM CO2 DRY CHEMICAL FOAM WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: UPON BURNING, TOXIC GASES MAY BE RELEASED.

SPECIAL FIREFIGHTING PROCEDURES: FIREFIGHTERS SHOULD WEAR SELF CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE - EYE CONTACT: MAY CAUSE IRRITATION AND TEARING

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: NONE RECOGNIZED. THIS PRODUCT MAY CAUSE ALLERGIC SKIN REACTIONS IN SENSITIVE INDIVIDUALS. IRRITATION.

EFFECTS OF OVEREXPOSURE - INHALATION: INHALATION: REMOVE TO FRESH AIR, RESTORE BREATHING. CONSULT A PHYSICIAN. IRRITATION FROM PROLONGED EXPOSURE WITH LITTLE VENTILATION.

EFFECTS OF OVEREXPOSURE - INGESTION: LARGE QUANTITIES UPSETTING TO GASTROINTESTINAL TRACT.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: NONE KNOWN.

FIRST AID - EYE CONTACT: FLUSH WITH WATER 15 MINUTES, LIFTING EYELIDS.

FIRST AID - SKIN CONTACT: WASH WITH SOAP AND WATER.

FIRST AID - INHALATION: REMOVE TO FRESH AIR.

FIRST AID - INGESTION: DO NOT INDUCE VOMITING. DRINK LARGE AMOUNTS OF WATER.

PRIMARY ROUTE (S) OF ENTRY: INGESTION EYE CONTACT

