

Material Safety Data Sheet.

SECTION I. Chemical Product and Company Identification

PRODUCT NAME	Multi-N
TRADE NAME	Multi-N
CHEMICAL NAME	Not applicable; mixture of essential plant nutrients.
CHEMICAL FORMULA	Not applicable -mix inorganic and organic materials
CHEMICAL FAMILY	mineral fertilizer
SYNONYM	NPK Fertilizer with micronutrients

MSDS prepared by the quality management of MCFP



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SECTION II. Hazardous Ingredients

Exposure Limits (ACGIH)

NAME	CAS #	TLV- TWA mg/m ³ ppm	STEL mg/m ³ ppm	CEIL mg/m ³ ppm	% by Weight
No regulated components	No regulated components	No regulated components	No regulated components	No regulated components	No regulated components

TOXICOLGICAL DATA ON INGREDIENTS	Not applicable. This product is not considered hazardous and All ingredients are free of radiation based on the Jordanian Energy Authority Tests and laboratories of the Jordanian Agriculture Ministry.
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SECTION III. Hazards Identification.

POTENTIAL HEALTH EFFECTS ACUTE	This product may irritate eyes and skin upon prolonged or repeated contact from mechanical action and the drying effect of mineral salts. Over-exposure by inhalation may cause respiratory tract irritation. Ingestion of this substance may produce irritation of the gastrointestinal tract, characterized by burning and diarrhea.
POTENTIAL HEALTH EFFECTS CHRONIC	There is no known effect from chronic exposure to this product.
EYE CONTACT	May cause eye irritation. Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Obtain medical attention if irritation persists.
MINOR SKIN CONTACT EXTENSIVE SKIN CONTACT	No significant irritation expected from a single short-term exposure. May cause light sensitivity
MINOR INHALATION SEVERE INHALATION	No significant irritation expected from a single short-term exposure. Repeated or prolonged inhalation of dust may lead to respiratory irritation. Loosen tight clothing around the individual's neck and waist. Allow the person to rest in a well ventilated area. Obtain medical attention if irritation persists.

SLIGHT INGESTION	Remove dentures if any. If conscious, have the person drink several glasses of water or milk and induce vomiting. Never give anything by mouth to an unconscious person. Lower the head so that the vomit will not reenter the mouth or throat. Obtain medical attention.
EXTENSIVE INGESTION	No additional information.

SECTION V. Fire and Explosion Data

AUTOR-IGNITION TEMPERATURE	Not applicable
FLASH POINT	Non flammable
FLAMMABILITY LIMITS	Not flammable
PRODUCTS OF COMBUSTION	Material will not burn. Undergoes thermal decomposition at elevated temperatures to release toxic and combustible gases: ammonia, nitrogen oxides, sulfur oxides, phosphorous oxides, and potassium oxides.
FIRE HAZARD IN THE PRESENCE OF VARIOUS SUBSTANCES	Not applicable
EXPLOSION HAZARD IN THE PRESENCE OF VARIOUS SUBSTANCES	This product is no-explosive
EXPLOSION HAZARD IN THE PRESENCE OF VARIOUS SUBSTANCES	This product is no-explosive
FIRE FIGHTING MEDIA AND INSTRUCTIONS	Material will not burn. Undergoes thermal decomposition at elevated temperatures to release toxic and combustible gases. Use extinguishing media suitable for surrounding materials.

SPECIAL REMARKS ON FIRE HAZARDS	Non combustible. Flammable/toxic gases will form at elevated temperatures (>190 °C) by thermal decomposition (ammonia, sulfur oxides, nitrogen oxides, phosphorous oxides). A self contained breathing apparatus should be used to avoid inhalation of toxic fumes.
SPECIAL REMARKS ON EXPLOSION HAZARDS	No additional remarks.
SECTION VI. Accidental Release Measures	
SMALL SPILL	Use appropriate tools to put the spilled solid in a suitable container for intended use or disposal
LARGE SPILL	Prevent additional discharge of materials, if possible to do so without hazard. Prevent spills from entering sewers, watercourses, wells, etc. Product will promote algae growth and may degrade water quality and taste. Notify downstream water users. Recover and place material in suitable containers for recycle, reuse, or disposal. Ensure disposal is in compliance with government requirements and local regulations.
SECTION VII. Handling and Storage.	
HANDLING	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Keep container tightly closed. Do not get on skin or in eyes. Discard contaminated shoes
STORAGE	Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area. Store away from alkalis, Keep material out of the reach of children.

SECTION VIII. Exposure Controls/Personal Protection

ENGINEERING CONTROLS	Uses process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If uses operations generate dust, use ventilation to keep exposure to airborne contaminants below the exposure limits.
PERSONAL PROTECTION	The selection of personal protection equipment varies, depending upon conditions of use. Where skin and eye contact may occur as a result of brief periodic exposures, wear long sleeve clothing, coveralls, leather gloves, and safety glasses.
PERSONAL PROTECTION IN CASE OF LARGE RELEASE	Work practice or other control measures are not adequate to prevent overexposure. Where skin and eye contact may occur as a result of prolonged or repeated exposures.
EXPOSURE LIMITS	Does not emit gases and dust in the appropriate Storage conditions.

SECTION IX. Physical and Chemical Properties

PHYSICAL STATE AND APPEARANCE	Liquid
MOLECULAR WEIGHT	Not available
COLOR	Brown
ODOR	Odorless
TASTE	Acidic
pH (1/100)	5.3
E.C (1/1000)	1.0 mS
SOLUBILITY in water	100%, Easily soluble in hot and cold water.
VOLATILITY	Not applicable
MELTING POINT	Not available
CRITICAL TEMPERATURE	Not available
SPECIFIC GRAVITY g/cc	1.34 (Water =1)
BULK DENSITY Lbs/ft ³	1340 Kg/m ³
DISPERSION PROPERTIES	See solubility in water
VAPOR PRESSURE	Not applicable

VAPOR DENSITY	Not applicable
SECTION X. Stability and Reactivity Data	
STABILITY	The product is stable under suitable condition
INCOMPATIBILITY WITH VARIOUS SUBSTANCES	Slightly reactive to reactive with oxidizing agents. Very slightly to slightly reactive with metals, moisture.
CORROSIVITY	Slightly corrosive to steel, and 304 stainless steel. Non-corrosive to stainless steel.
SPECIAL REMARKS ON CORROSIVE ACIDS.	Avoid contact with moisture. Slow hydrolysis will produce corrosive acids.
SPECIAL REMARKS ON CORROSIVITY	Incompatible with copper alloys. Corrosive to brass. Corrosive to ferrous metals and alloys.
SECTION XI. Toxicological Information	
SIGNIFICANT ROUTS OF EXPOSURE	Ingestion. Inhalation
TOXICITY TO ANIMALS	Acute oral toxicity (LD 50):>3000 mg /1 Kg (Rat)
SPECIAL REMARKS ON TOXICITY TO ANIMALS	Very low toxicity for humans or animals. Will release ammonium ions. Ammonia is a toxic hazard to fish. May be harmful to livestock and wildlife if ingested. Clean up all spilled material, especially where bulk fertilizer loading of equipment occurs.

OTHER EFFECTS ON HUMANS	Our data base contains no additional remark on the toxicity of this product.
SPECIAL REMARKS ON CHRONIC EFFECTS ON HUMANS	No additional remarks
SPECIAL REMARKS ON OTHER EFFECTS ON HUMANS	No additional remarks.

SECTION XII. Ecological Information

ECOTOXICITY	Non-persistent. Non cumulative when applied using normal agricultural practices. Low toxicity for humans or animals under normal conditions of use. May be harmful to livestock and wildlife if ingested. Clean up all spilled material, especially where bulk fertilizer loading of equipment occurs to prevent animal exposure.
BOD and COD	Not available
TOXICITY OF THE PRODUCTS OF DEGRADATION	The products of biodegradation are not harmful under normal conditions of slow metabolic release.
SPECIAL REMARKS ON THE PRODUCTS OF DEGRADATION	May degrade water quality and taste. Notify downstream water users. Sulfates in potable drinking water should be maintained below 500 mg/L. Will dissolve and disperse in water. Reclaiming material may not be viable.

SECTION XIII. Disposal Consideration

Waste Disposal or Recycling	Recycle to process, if possible. Ensure disposal is in compliance with government requirements and local regulations. Consult your local or regional authorities.
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SECTION XIV. Transport Information

DOT/TDG CLASSIFICATION	Not controlled under TDG (Canada) or D.O.T. (U.S.A.)
PIN	Not applicable (PIN or PG)
SPECIAL PROVISIONS FOR TRANSPORT	Not applicable

UN-Number	None
UN proper shipping name	None
Transport hazard class(es)	None
Environmental hazards:	None