



Finding New Ways to Improve the
Treatment of Trees and Plants.

SAFETY DATA SHEET

PRODUCT NAME: **Iron Max 12-0-0 6% Fe 2% Mn**

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

DISTRIBUTOR: Quest Products Corporation
ADDRESS: 23611 Linwood Road (K-32)
Linwood, KS 66052
PHONE: (785)-542-2577

EMERGENCY CHEMTREC PHONE - US & Canada: 1-800-424-9300

CHEMICAL NAME: Inorganic/Organic Chemical Fertilizer Mixture

CHEMICAL FAMILY: Fertilizer

CHEMICAL FORMULA: Mixture

PRODUCT USE: Fertilizer

SECTION 1 NOTES: None

SECTION 2: HAZARDS IDENTIFIED

GHS Ratings:

Signal Word: WARNING

GHS Hazards

H303 – May be harmful if swallowed.
H316 – Causes mild skin irritation.
H320 – Causes mild eye irritation.
H333 – May be harmful if inhaled.
H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled.

GHS Precautions

P101 – If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.
P233 - Keep container tightly closed.
P234 - Keep only in original container.
P261 – Avoid breathing fumes/vapors.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 – Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves, protective clothing and eye protection.



SECTION 3: COMPONENT INFORMATION

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT</u>
Urea	57-13-6	12.0%
Ferrous Sulfate	7720-78-7	6.0%
Manganese Sulfate	7320-34-5	1.0%
Manganese Citrate	10024-66-5	1.0%
Citric Acid	77-92-9	1.0%
Proprietary Formulation Ingredients		100%

SECTION 3 NOTES: If Chemical Name/CAS Number is listed as "Proprietary" and/or the Weight % is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

CARCINOGENICITY

OSHA: No ACGIH: No NTP: No IARC: No OTHER: No

SECTION 4: FIRST AID MEASURES

Have the product label and SDS with you when calling a poison control center or doctor, or going for treatment, if able.

Never give anything by mouth to an unconscious person.

IF IN EYES: Rinse with plenty of running water for at least 15 minutes. Remove contact lenses if present and easy to do so, after the first 5 minutes - then continue rinsing. Seek medical advice or attention if condition worsens or symptoms persist.

IF ON SKIN OR CLOTHING: Remove contaminated clothing, wash before reuse. Wash skin with plenty of soap and water. Seek medical advice if irritation develops or persists.

IF SWALLOWED: If conscious and alert, give 2 to 4 glasses of water to dilute substance. Do not induce vomiting unless instructed by CHEMTREC representatives or medical professionals.

IF INHALED: Remove to fresh air and ventilate suspected area. Keep at rest in a position comfortable for breathing. Seek medical attention if difficulty breathing develops, condition declines, or symptoms persist.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Treat symptomatically.

SECTION 4 NOTES: May cause eye or skin irritation on contact, or digestive tract irritation if ingested.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT °C: Not applicable.

IN CASE OF FIRE: Use carbon dioxide or dry chemical for small fires and water fog or foam (alcohol, polymer, or ordinary) for large fires. Water stream may spread flames.

SPECIAL FIRE FIGHTING PROCEDURES: Use alcohol-type or universal-type foams on larger fires. Smaller fires should be extinguished with carbon dioxide or dry chemical. Do not use water or foam directly on the fire. Do not release contaminated runoff from fire control methods to sewers or waterways. Use self-contained breathing apparatus with fighting any fire in an enclosed area.

UNUSUAL FIRE AND EXPLOSION HAZARDS: When ignited, produces toxic and irritating fumes. Wear a MSHA/NIOSH-approved or equivalent respiratory protection.

HAZARDOUS COMBUSTION PRODUCTS: Ammonia, nitrogen oxides, oxides of carbon, phosphorus oxides.

SECTION 5 NOTES: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Stop the source of the spill immediately if it safe to do so. Ventilate the affected area. Wear protective clothing as described in Section 8 of this SDS. Avoid runoff into storm sewers and ditches which lead to waterways. Material should be collected and disposed in proper manner. Contained materials may be salvaged for use, if uncontaminated.

CLEAN-UP MEASURES: Follow federal, state and local regulations for liquid and solid waste disposal. Absorb material with sand, kitty litter or other inert material. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state and local regulations. Wear suitable protective equipment.

SECTION 6 NOTES: Do not breathe mist or vapors. Do not get in eyes, on skin or on clothing. Do not ingest. See section 1 for CHEMTREC emergency phone number. See Section 12 for additional Ecological Information.



SECTION 7: HANDLING AND STORAGE

HANDLING Keep out of reach of children. Read label before use. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not eat, drink or smoke when using this product. Avoid direct contact with substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid breathing spray mist. Wash hands thoroughly after handling. Take off contaminated clothing and wash before reuse. Wear protective gloves, protective clothing, eye protection and face protection.

STORAGE: Store in a cool, dry, well-ventilated place. Keep in original container tightly closed. Do not reuse empty container. Do not store with food, feed, or other material to be used or consumed by humans or animals. Do not contaminate water supplies.

SECTION 7 NOTES: **INCOMPATIBLE MATERIALS** – Strong oxidizing agents, strong acids, strong alkalis.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.**

EXPOSURE GUIDELINES:	Chemical Name	CAS Number	ACGIH TLV	OSHA PEL	NIOSH REL
	Urea	57-13-6	15mg/M ³	15mg/M ³	NE
	Ferrous Sulfate	7720-78-7	1mg/M ³	NE	1mg/M ³
	Manganese Sulfate	7320-34-5	0.2mg/M ³	5mg/M ³	1mg/M ³
	Manganese Citrate	10024-66-5	0.1mg/M ³	5mg/M ³	1mg/M ³
	Citric Acid	77-92-9	10mg/M ³	NE	NE
VENTILATION:	Normal room ventilation (mechanical) or outdoor use should be satisfactory.				
RESPIRATORY PROTECTION:	Wear a NIOSH/OSHA approved respirator, approved for use with propionic acid, if necessary.				
EYE PROTECTION:	Safety glasses with side shields as described by OSHA's eye and face protection regulations in 29CFR 1910.133. 				
SKIN PROTECTION:	Wear impervious protective clothing, long pants and long-sleeved shirt, waterproof gloves (including socks and boots), lab coat, apron or coveralls, as appropriate – to prevent skin contact. 				
OTHER PROTECTIVE CLOTHING/EQUIPMENT:	Eye wash and safety shower should be easily accessible.				
WORK HYGIENIC PRACTICES:	Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse.				
EXPOSURE GUIDELINES:	If exposed, see section 4 for acute exposure first aid.				
SECTION 8 NOTES:	None				

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear/Brown Liquid	FLAMMABLE LIMITS:	Not Determined
ODOR:	Ammonia	VAPOR PRESSURE (mmHg):	@ Unknown F: N/A C: N/A
ORDER THRESHOLD:	Undetermined	VAPOR DENSITY (AIR = 1):	@ Unknown F: N/A C: N/A
PHYSICAL STATE:	Liquid	SPECIFIC GRAVITY (water = 1):	1.378
pH AS SUPPLIED:	4.5	EVAPORATION RATE:	N/A
pH (Other):		BASIS (butyl acetate=1):	
INITIAL BOILING POINT:	F: Not Determined C: Not Determined	SOLUBILITY IN WATER:	100% Miscible
BOILING POINT RANGE:	F: Not Determined C: Not Determined	PARTITION COEFFICIENT (n-octanol/water):	No Data Available
MELTING POINT:	F: Not Determined C: Not Determined	AUTO-IGNITION TEMPERATURE:	N/A
FREEZING POINT:	F: <32° C: <0°	DECOMPOSITION TEMPERATURE:	N/A
METHOD USED:	N/A	VISCOSITY:	Non-viscous
FLASH POINT:	F: Not Determined C: Not Determined		
PERCENT VOLATILE (by volume):	45%		

SECTION 9 NOTES: VALUES ARE NOT PRODUCT SPECIFICATIONS.

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable Unstable

CONDITIONS TO MAINTAIN STABILITY: Store in a cool, well-ventilated place away from sources of heat and direct sunlight. Keep container tightly closed. Keep only in original container.

INCOMPATIBILITY (MATERIAL TO AVOID): High pH products.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: When ignited, produces toxic and irritating fumes. May aggravate respiratory conditions. Wear a NIOSH-certified respirator when fighting fires.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID (POLYMERIZATION): Will not occur.

SECTION 10 NOTES: None

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY: May be harmful if ingested. Primary symptoms include nausea, vomiting, chills, diarrhea.

ACUTE DERMAL TOXICITY: Prolonged contact may cause redness and/or irritation.

ACUTE INHALATION TOXICITY: Harmful if inhaled. Avoid breathing in vapors or mists.

EYE DAMAGE / IRRITATION: Direct contact with eyes will cause temporary irritation.

SKIN CORROSION: Not classified.

RESPIRATORY SENSITIZATION: Not classified.

CARCINOGENITY: Not suspected to be a carcinogen by OSHA, IARC, NTP or ACGIH.

SECTION 11 NOTES: None.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful, or damaging effect on the environment. This product is not intended for use in aquatic settings. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

MOBILITY: Suspected to be mobile in soil media as the product is aqueous.

PERSISTENCE/DEGRADABILITY: Not Determined.

BIOACCUMULATION: Not Determined.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Do not contaminate water, food or feed by storage or disposal. Dispose of contents in container to an approved waste disposal facility in accordance with all federal, state and local regulations.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container.

RCRA HAZARD CLASS: Not subject to RCRA Subtitle C Regulation

CALIFORNIA HAZARDOUS WASTE STATUS: Not listed.

SECTION 13 NOTES: None.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

DOT Shipping Description: Not Regulated.

U.S. Surface Freight Classification: NMFC 101716, class 50 (Liquid). Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

OTHER AGENCIES: None.

SECTION 14 NOTES: Please see current shipping paper for most up-to-date shipping information, including exemptions and special circumstances.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Toxic Substance Control Act

Urea is listed on the TSCA inventory list.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

California Proposition 65

This product does not contain any Proposition 65 chemicals.

SECTION 15 NOTES: May be harmful if swallowed, absorbed through skin or inhaled. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist or vapors. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse. Wear the appropriate Personal Protective Equipment (PPE).

SECTION 16: OTHER INFORMATION

DATE OF PREPARATION/LAST REVISION: September 25th, 2024

OTHER INFORMATION:

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission (CPSC).

The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration applicable to this SDS differ from the labeling requirements of the CPSC, and, as a result, this SDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

DISCLAIMER

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This SDS is intended to comply with OSHA regulations under the Hazard Communication Standard (29 CFR 1910.1200) and other applicable regulatory requirements. Users are encouraged to consult additional resources and seek professional advice to ensure comprehensive compliance with all relevant health, safety, and environmental regulations. This SDS may be updated periodically to reflect new information or regulatory changes. Users should ensure they are referring to the most recent version of the SDS. Inclusion of any

specific product, material, or process in this SDS does not imply endorsement or approval by the manufacturer. The information provided is not intended to replace professional judgment or regulatory advice.