

SAFETY DATA SHEET

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME **EMERGENCY TELEPHONE**

HvdroGro

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Chemtrec U.S.-Canada:

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DATE PREPARED: September 9, 2015 **REVISION DATE: July 23, 2021**

MP-X PRODUCT NAME:

FORMULA: Preparation/Mixture

PRODUCT USE: Supplement for professionally maintained golf courses, sport turf, lawn, and landscaping

Section 2: Hazards Identification

GHS Hazard Class Acute toxicity (oral) - Category 4

Skin Corrosion/Irritation - Category 2 Serious eye damage/irritation - Category 1

Signal word: Warning

Hazard Statement: H302: Harmful if swallowed

H315: Causes skin irritation H319: Causes serious eve irritation

Precautionary Statements: Prevention

P281: Use personal protective equipment as required P270: Do not eat, drink or smoke when using this product

Response P308+P313: IF exposed or concerned: Get medical advice/attention

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330: Rinse mouth

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P264: Wash hands thoroughly after handling

Storage P405: Store locked up

Disposal P501: Dispose of contents/container in accordance with waste disposal requirements of your country,

state, or local authorities

Hazards not otherwise classified (HNOC) or not covered by GHS - None

HAZARD CLASSIFICATION: Not classified as hazardous based on IATA, IMDG, and DOT.

FIRE AND EXPLOSION: Not considered flammable or combustible, but this product will burn if involved in a fire.

Product emits toxic fumes when burned.

POTENTIAL HEALTH EFFECTS: <1 % of mixture consists of ingredients of unknown acute toxicity

Tan -Blend of crystals and powders APPEARANCE:

NFPA Rating:

Component	Health (Blue)	Flammability (Red)	Reactivity (Yellow)	Special (White)
MP-X	1	0	1	



Section 3: Composition, Information on Ingredients

PRODUCT COMPOSITION	APPROX %	CAS NO.	EC NUMBER	CANADA DSL
Non-hazardous ingredients	<70			
Iron Glycinate	<15	20150-34-9		N
Magnesium Sulphate	<5	7487-88-9	231-298-2	Y
Manganese Glycinate	<5	6912-28-3		N
Zinc Glycinate	<2	14281-83-5	238-173-1	N
Boric Acid	<1	10043-35-3	233-139-2	Y
Copper Glycinate	<1	54-40-6		N
Sodium Molybdate	<1	10102-40-6		N

Some items on this SDS may be designated as trade secrets (TS). Bonafide requests for disclosure of trade secret information to medical personnel must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13.

Section 4: First Aid Measures

Description of First Aid Measures

Inhalation Remove to fresh air. If not breathing, provide CPR (cardio pulmonary

resuscitation). Get immediate medical attention.

Skin Contact Immediately wash skin with plenty of soap and water for at least 15 minutes.

Remove contaminated clothing.

Eye Contact Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate

medical attention.

Ingestion Do not induce vomiting. Never give anything to an unconscious person. Get

immediate medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/Injuries after Inhalation May cause respiratory tract irritation.

Symptoms/Injuries after Skin Contact May cause skin irritation. Symptoms may include redness, drying, defatting, and

cracking of the skin.

Symptoms/Injuries after Eye Contact Causes eye irritation. Symptoms may include discomfort or pain, excess

blinking and tear production, with possible redness and swelling.

May be harmful if swallowed. Effects may include diarrhea, vomiting.

Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately.

Section 5: Fire-fighting Measures

Suitable extinguishing media

Symptoms/Injuries after Ingestion

Special hazards arising from the substance or mixture Protective actions fire-fighters

Further information

Use foam, dry chemical, carbon dioxide, or any media suitable to extinguish the surrounding fire

Release of toxic gases at elevated temperatures

Wear standard protective equipment and self contained breathing apparatus for firefighting if necessary.

Decomposes on heating. This produces sulfur oxides and manganese

oxides.



Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing dust.

Environmental precautions

Prevent further spillage if safe to do so. Prevent spills or contaminated rinse water from entering sewers or watercourses.

Methods and materials for containment and cleaning up

In case of small spills, use appropriate tools to put the spilled material in a plastic container. Dispose of according to the requirements of your country, state, or local authorities.

In case of large spills, use a shovel to put the material into a plastic container. Dispose of according to the requirements of your country, state, or local authorities.

Reference to other Sections For personal protection reference section 8. For disposal reference section 13.

Section 7: Handling and Storage

Precautions for safe handling

Use only with adequate ventilation.

Do not inhale dust.

Keep out of reach of children.

Wear proper protective equipment when handling this material.

Avoid contact with skin, eyes, or clothing.

Wash hands and face after handling this material.

A plastic container should be used for disposal.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Store upright in a cool, dry place.

Keep container closed when not in use.

Keep away from heat, sparks, flame, direct sunlight, and other possible sources of ignition.

Do not store with acid, metallic oxide, amines, and combustible materials.

Utilize chemical segregation.

Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended to be used as a supplement for professionally maintained golf courses, sport turf, landscaping and specialty crops.

Section 8: Exposure Controls/Personal Protection

Control Parameters

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH REL
Iron Glycinate			
Iron Glycinate			-
Magnesium Sulphate			
Manganese Glycinate (Mn compounds)	5 mg/m³	5 mg/m³	
Zinc Glycinate			
Boric Acid			
Copper Glycinate			
Sodium Molybdate			

NIOSH-- No Occupational exposure values

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Exposure controls

VENTILATION: Always provide good general, mechanical room ventilation where this

chemical/material is used.

SPECIAL VENTILATION CONTROLS: None

RESPIRATORY PROTECTION: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or the CEN

> European Standards (EU). Use a NIOSH/MSHA or European Standard (EN) approved respirator if exposure limits are exceeded or if irritation or other

symptoms are experienced.

PROTECTIVE GLOVES: Neoprene, butyl, or nitrile rubber gloves are recommended. EYE PROTECTION: Recommend eye protection using safety glasses or goggles. SKIN PROTECTION:

Suitable protective clothing to prevent skin contact

WORK/HYGIENE PRACTICES: Avoid breathing dust. Avoid contact with eyes. Wash hands after handling. OTHER EQUIPMENT: Make safety shower, eyewash stations, and hand washing equipment available in

the work area.

Section 9: Physical and Chemical Properties

	PRODUCT CRITERIA
APPEARANCE - COLOR:	Tan
PHYSICAL STATE:	Blend of crystals and powders
ODOR:	None
ODOR THRESHOLD	No data available
PH	4.4 – when mixed with water
MELTING POINT/FREEZING POINT:	No data available
INITIAL BOILING POINT AND BOILING RANGE:	No data available
FLASH POINT:	No data available
EVAPORATION RATE:	No data available
FLAMMABILITY (Solid, gas)	Not flammable
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	Not Measured
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C):	1.0-1.2 g/ml (tapped 1.14 g/ml)
SOLUBILITY(IES)	Soluble in water
OXIDIZING PROPERTIES	Not an oxidizer
PARTITION COEFFICIENT: n-octanol/water	No data available
AUTO IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY	No data available

Section 10: Stability and Reactivity

Reactivity: Reacts with strong acids and strong oxidizers. Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: Will not occur under normal temperatures and pressures.

Conditions to Avoid: High temperatures, high pressure, increasing the pH, and incompatible materials.

Incompatibility (Materials to avoid): Oxidizing agents, metals, lead, calcium, strontium salts borax, hydroxides, silver

proteins, tannins, ethoxy ethyl alcohols, arsenates, phosphates, tartrates, barium,

and powdered metals.

Hazardous Decomposition Products: Decomposition products include NOx, SOx, metals oxides and NH3.

Section 11: Toxicological Information

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Acute Toxicity	LD50(Oral/Rat):	5 g/kg	Category 4	Iron Glycinate
Skin Corrosion/Irritation	Causes skin irritation		Category 2	Iron Glycinate
Serious Eye Damage / Eye Irritation	Causes serious eye irritation		Category 2	Iron Glycinate

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	Causes serious eye irritation		Category 1	Zinc Glycinate
Respiratory or Skin Sensitization		Data not available		
Germ Cell Mutagenicity	No Data available			
Carcinogenicity	NTP	Not listed		
	IARC	Not listed		
	OSHA	Not listed		
Reproductive Toxicity	No data available			
STOT Single Exposure	No data available			
STOT – Repeated Exposure	No data available			
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Toxicity

Section 12: Ecological Information

Chemical Constituent

Toxicity:	tity: LC50 Fish (Lepomis macrochirus) 41mg/l, 96hr.	
Persistence and degradability:	Persistence and degradability: No information is available.	
Bioaccumulative potential	No information is available.	
Mobility in soil:	No information is available.	
PBT and vPvB assessment:	PBT/vPvB assessment not available as chemical assessment not required/not conducted	
Other adverse effects:	No information is available.	

Section 13: Disposal Considerations

Waste from residues/unused products: Follow the waste disposal requirements of your country, state, or local authorities.

Contaminated packaging: Contaminated packaging material should be disposed of as stated above for residues and unused product.

Rinsate: Do not dispose of rinse water containing product in a sanitary sewer system or stormwater drainage system.

Section 14: Transport Information

DOT TRANSPORT:Not RegulatedADR = International Carriage of Dangerous Goods by RoadNot RegulatedRAIL TRANSPORT:Not RegulatedSEA TRANSPORT:IMDGNot RegulatedAIR TRANSPORT:IATA/ICAONot Regulated

Section 15: Regulatory Information

TOXIC SUBSTANCE CONTROL ACT (TSCA) STATUS:

This product is in compliance with rules, regulations, and orders of TSCA. All components are either listed on the TSCA inventory or are considered exempt.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:



This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. This information must be included in all SDS's that are copied and distributed for the material.

The Section 313 toxic chemicals contained in this product are: None

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.

The California proposition 65 chemical(s) contained in this product are: None

STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

Massachusetts's hazardous substance(s):
New Jersey
Not listed
Pennsylvania
Not listed

CANADA:

WHMIS-2015: This SDS is in compliance with WHMIS 2015 (HPR / new HPA).

EUROPEAN UNION:

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Regulation (EC) No 1272/2008 on classification, labeling, and packaging (CLP) of substances and mixtures.

Section 16: Other Information

Initial issue date: September 9, 2015 Final revision date: July 23, 2021

Revision Number:

Revision explanation Address Change

Information Sources: RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

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