Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Seedlingers Flower Food

Product Use: A liquid foliar spray designed to feed the plant soluble nutrients through the leaves and roots.

Company: Messinas

490 Washington, NJ 07882 PH: 908-320-7009

Emergency 800-658-2481

Response:

Section 2: Hazards Identification

GHSU5





Hazard Pictograms:

Signal Word:

DANGER

Hazard Category: Flammable Liq Cat 4

Skin corrosion/irritation Cat 1

Serious eye damage/eye irritation Cat 1

Corrosive to metals Cat 1 Reproductive tox Cat 2

Hazard Statements: H227: Combustible liquid

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage H290: May be corrosive to metals

H361: Suspected of damaging fertility or the unborn child

Precautionary

P202: Do not handle until all safety precautions have been read and understood

Statements: P260: Do not breathe dust/fume/gas/mist/vapours/spray

P262: Do not get in eyes, on skin, or on clothing

P264: Wash thoroughly after handling

P280: Wear protective gloves/protective clothing/eye protection/face protection

P285: In case of inadequate ventilation wear respiratory protection

P301+P330+P353: IF SWALLOWED: rinse mouth. Do NOT induce vomiting P303+P361+P331: IF ON SKIN (or hair): Remove/Take off immediately all P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position

comfortable for breathing

 $P305 + P351 + P338 - If in eyes: Rinse \ cautiously \ with \ water \ for \ several \ minutes. \ Remove$

P308+313: IF exposed or concerned: Get medical advice/attention

P403+235: Store in a well ventilated place. Keep cool

P405: Store locked up

P406: Store in a corrosive resistant container, may corrode metallic surfaces

P411+235: Store at temperatures not exceeding 23 °C/73.4 °F.

P501: Dispose of contents/container in accordance with local/national/international

rules.

Hazards not

otherwise classified: Not applicable, none known.

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Urea	Skin Irrit. 2, H315 Eye Irrit. 2B, H320	57-13-6	2-8%
Phosphoric Acid	Skin Corr. 1B, H314 Eye Dam. 1, H318	7664-38-2	15-40%
Monopotassium Phosphate	Eye Dam./Irrit. 2B, H320	7758-11-4	5-10%
Calcium Nitrate	Skin Irrit 3, H316 Eye Irrit. 2B, H320	10124-37-5	20-30%
Water		7732-18-5	12-48%

Section 4: First Aid Measures

If ingested: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical. Loosen tight clothing such as a collar, tie, belt or waistband.

If inhaled: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Notes to Physician: No specific antidote, medical staff contacts Poisons Information Center. All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire Fighting Measures

General Info: May be combustible at high temperature. Non-explosive in presence of open flames and spraks, of shocks.

Products of Combustion: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Extinguishing Use extinguishing media suitable for surrounding materials. SMALL FIRE: Use DRY chemical Method / Equipment: powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. Fire Fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Hazardous Thermal decomposition products are dependent on temperature. Under fire - hydrogen, hosphine **Decomposition Info:** (highly flammable gases), oxides of potassium, oxides of phosphorous.

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Fire Hazards in Of metals. Slightly flammable to flammable in presence of heat.

Presence of Various

Substances:

Special Remarks on Reacts with metals to liberate flammable hydrogen gas. Formation of flammable gases with

Fire Hazards: aldehydes, cyanides, mercaptins, and sulfides.

Special Remarks on Mixtures with nitromethane are explosive. (Phosphoric Acid)

Explosion Hazards:

Section 6: Accidental Release Measures

Personal precautions, No action shall be taken involving any personal risk or without suitable training.

protective equipment Evacuate surrounded areas. Keep unnecessary and unprotected personnel from

and procedures: entering. Do not touch or walk through split material. Provide adequate ventilation.

Wear appropriate respirator when ventilation is inadequate. Put on appropriate

personal protective equipment (see Section 8).

Containment Large Spills: Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY

Equipment and earth, sand or other non-combustible material. Do not get water inside container. Do not touch **Procedures:** spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors.

Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities. DO NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.

Small Spills: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate. Dispose of according to local and regional authority requirements.

Section 7: Handling and Storage

Safe Handling Do not handle until all safety precautions have been read and understood. Do not ingest. Do not

Precautions: breathe gas/fumes/ vapor/spray. In case of insufficient ventilation, wear suitable respiratory

equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, combustible materials, metals alkalis. May corrode metallic surfaces. Keep locked up. Toxic to fish and other aquatic organisms. Do not contaminate water supplies by handling and storage of product. Drift or runoff may adversely affect aquatic invertebrates and non-target plants.

Recommendations Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not

for Storage: store above 23°C (73.4°F). Store in original packaging as approved by manufacturer.

Incompatibilities: Reactive with oxidizing agents, combustible materials, metals, alkalis. Refer to Section 10.

Section 8: Exposure Control / Personal Protection

General / Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of

Engineering vapors below their respective threshold limit value. Ensure that eyewash stations and safety

Controls: showers are proximal to the work-station location.

Work Clothing: Full suit.

Eye/face protection: Wear safety goggles or face shield.

Skin Protection: Gloves. Boots.

Respiratory Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Protection:

Additional Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash

Information: hands or exposed skin after using the product.

Personal Protection Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus In Case of a Large should be used to avoid inhalation of the product. Suggested protective clothing might not be

Spill sufficient; consult a specialist BEFORE handling this product.

Section 9: Physical and Chemical Properties

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State: Liquid Melting Point: Not avail Freezing Not avail Point:

Color: Clear **Boiling** Unknown pH < 1.0

Point/Range:

Sp Grav: Not avail Odor: None **Water** 100%

Solubility:

Flash Point: Not avail Part. Coeff (n. Not avail **Evaporation rate:** Not avail

octanol/water

Upper Flam Limits: Not avail Lower Flam Not avail Vapor Not avail

> Limits: **Pressure:**

VOC Content 0 Viscosity: Not avail Autoignition Unknown

(lbs/gal): Temp:

Section 10: Stability and Reactivity

General: This product is stable.

Incompatible Reactive with oxidizing agents, combustible materials, metals, alkalis.

materials:

Special Remarks on Hygroscopic. Absorbs moisture from air. Reacts violently with Gallum Perchlorate. Reacts with

Reactivity: chlorine to form chloramines. It also reacts with the following: sodium hypochlorite, sodium

nitrate, calcium hypochlorite, NaNO2, P2C15, nitrosyl perchlorate, strong oxidizing agents

(permanganate, nitrate, dichromate, chloride).

Corrosivity: Extremely corrosive in presence of copper, of stainless steel (304), of stainless steel (316). Highly

corrosive in presence of aluminum. Minor corrosive effect on bronze. Severe corrosive effect on

brass. Corrosive to ferrous metals and alloys. Non-corrosive in presence of glass.

Materials to Avoid: Organic chemicals. Ammonia. Strong oxidizing agents, strong acids.

Conditions to Avoid: Excess heat.

Hazardous Decomposes on heating emitting toxic fumes, including those oxides of nitrogen, hydrogen,

Decomposition phosphine, oxides of phosphorous, oxides of of potassium.

products:

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes or Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Chronic Effects on May cause damage to the following organs: blood, liver, skin, eyes, bone marrow. MUTAGENIC

Humans EFFECTS: Mutagenic for mammalian somatic cells. May cause damage to the following organs: blood, cardiovascular system.

Other Toxic Effects Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact on Humans: (corrosive, permeator), of eye contact (corrosive), or ingestion.

General Information: Nitrates: Ingestion of large quantities will cause methaemaglobinemia with headaches, heart beat

irregularities, blood pressure loss, cramps and breathing difficulties, cyanosis will occur.

Nephritis can result from chronic exposure.

Special Remarks on May cause adverse reproductive effects (fetotoxicity) and genetic material (mutagenicity) based Chronic Effects on on animal studies. Passes through the placental barrier in human and is present in breast milk. Humans:

US-SDS 4 of 5 Special Remarks on Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation.

Other Toxic Effects Inhalation: Causes irritation of the respiratory tract, nose, and throat, coughing and sneezing. May on Humans: also affect blood, metabolism and urinary system. Ingestion: Causes digestive (gastrointestinal) tract irritation with nausea, vomiting, and diarrhea. May affect behavior (altered sleep time, change in motor activity), cardiovascular system (heart rate), and the brain. May also affect the blood and may cause tumorigenic effects. Chronic Potential Health Effects: Prolonged exposure may cause adverse reproductive effects. Laboratory experiments on animals have resulted in mutagenic effects. Prolonged exposure or exposure at high concentrations may cause eye damage.

Section 12: Ecological Information

General information: Drift or runoff may adversely affect non-target plants. Do not apply directly to water. Do not

contaminate water when disposing of equipment wash water. Do not apply when weather

conditions favor drift from target area.

Ecotoxicity: No data available.

Products of Possible hazardous short term degradation products are not likely. However, long term

Biodegradation: degradation products may arise.

Toxicity of the The products of degradation are less toxic than the product itself.

Products of Biodegradation:

Environmental Fate: Avoid contaminating waterways, drains and sewers.

Section 13: Disposal Information

Waste Disposal Dispose according to federal, provincial/state and local environmental **Procedures:** regulations.

Section 14: Transport Information

Shipping Name: Seedlingers Flower Food

Section 15: Regulatory Information

Section 16: Other Information

SDS Author: Messinas Version Date: 10/28/24

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