Material Safety Data Sheet

MotherPlant® A

Product Name: MotherPlant® A Nutrient Solution for plants

Issue Date: December 2010

Manufactured by: Hydrodynamics International, Inc.
5711 Enterprise Drive,
Lansing, MI 48911
517-887-2007
Fax: 517-887-2008
info@hydrodynamicsintl.com

Identification:
Product Name: MotherPlant® Part **A**

Product Use: Concentrated solution of mineral nutrients and botanical extracts for plants.

Ingredients: The chemical identity of the compound and exact proportions used in the mixture are a trade secret; however, they include calcium nitrate and Iron DPTA.

HAZARDS INDENTIFICATION

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT
MAY BE HARMFUL IF SWALLOWED

Potential Health Effects

Primary Entry Routes: Ingestion, inhalation, and skin contact.
Target Organs: Gastrointestinal system, blood system, skin, mucous membranes
Ingestion: Ingestion can result in gastrointestinal distress, with abdominal pain, lethargy, nausea, vomiting, diarrhea, blood chemistry effects, cardiac effects, and central nervous system effects.
Eye: May cause irritation, redness, and pain.
Skin: Irritation.
Inhalation: Irritation.
Carcinogenicity: IARC, NTP, and OSHA do not list as a carcinogen.

Medical Conditions Aggravated by Long-term Exposure: Unknown

Chronic Effects: Repeated or prolonged exposure to some ingredients can produce target organ damage.

Other: None

First Aid Measures

Ingestion: Give several glasses of water for dilution, and encourage vomiting. If symptoms persist seek medical attention.

Eye Contact: Do not allow victim to rub or keep eyes tightly shut. Remove contact lenses then gently lift eyelids and flush immediately and continuously with flooding amounts of water for at least 15 minutes. Consult a physician or ophthalmologist if pain or irritation develops.

Skin Contact: Wash exposed area with soap and water. For reddened or blistered skin, consult a physician.

Inhalation: Remove exposed person to fresh air and support breathing, if necessary. Consult a physician as soon as possible.

Fire and Explosion Data

Flash Point: Unknown
Auto-Ignition Temperature: Unknown
LEL: Unknown
Flammability classification: Mother Plant® A is not combustible.
Burning Rate: Mother Plant® A is not combustible.
Extinguishing Media: Use dry chemical, carbon dioxide, water spray, fog, or foam for extinguishing surrounding fire.
Unusual Fire or Explosion Hazards: Container may explode in heat of fire.
Hazardous Combustion Products: None
Fire Fighting Instructions: Keep fire exposed containers cool with water spray. Remove containers from the fire area, if it can be done safely. Do not release run-off from fire control methods to sewers or waterways.
Fire Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece.

Accidental Release Measures

Spill/Leak Procedures: Wipe up with absorbent towels or mop.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Handling and Storage

Handling Precautions: Avoid ingestion, skin contact, eye contact, and inhalation
Storage Requirements: Keep in tightly closed containers stored in a cool, dry ventilated area.

Exposure Controls/ Personal Protection

Engineering Controls: Provide general or local exhaust ventilation systems to maintain airborne concentrations as low as possible.

Administrative Controls: Avoid breathing mist.

Respiratory Protection: If this product is used as directed, respiratory protection is not required.

Eye Protection: When handling MotherPlant ® A protective eyewear goggles should be worn per OSHA regulations (29 CFR 1910.134). Contact lenses pose a special hazard. Soft lenses may absorb irritants, and all contact lenses concentrate irritants. Particles may adhere to contact lenses and cause corneal damage.

Protective Clothing: Wear, when the possibility of skin or clothing contamination may exist. Wear neoprene or nitrile gloves when directly handling the product.

Safety Stations: Eye wash stations, quick drench showers, and washing facilities should be readily accessible to workers handling large quantities of MotherPlant® A.

Contaminated Equipment: Remove this material from shoes and equipment. Launder contaminated clothing before wearing.

Physical and Chemical Properties

Appearance: Yellowish to brown liquid

Odor: Slightly musty

pH: 3.6

Solubility: Fully soluble

Stability and Reactivity: Avoid temperature extremes

Health Effects: Due to low pH and concentrated mineral salts, some people may suffer irritation from exposure to skin/eyes or through ingestion

Disposal Considerations: Follow Federal, State, and local regulations

Transport Information: Not Regulated

Regulatory Info: EPA regulations not listed.

Material Safety Data Sheet

MotherPlant® B

Product Name: MotherPlant® B Nutrient Solutions for Plants

Issue Date: December 2010

Manufactured by: Hydrodynamics International, Inc.
5711 Enterprise Drive,
Lansing, MI 48911
517-887-2007
Fax: 517-887-2008
info@hydrodynamicsintl.com

Identification:
Product Name: MotherPlant ® B

Product Use: Concentrated solution of mineral nutrients and botanical extracts for plants in hydroponic growing systems

Ingredients: The chemical identity of the compound and exact proportions used in the mixture are a trade secret; however, they include potassium nitrate, magnesium sulfate, monoammonium phosphate, manganese, zinc, sodium borate, copper and molybdate.

HAZARDS INDENTIFICATION

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT
MAY BE HARMFUL IF SWALLOWED

Potential Health Effects

Primary Entry Routes: Ingestion, inhalation, and skin contact.
Target Organs: Gastrointestinal system, blood system, skin, mucous membranes
Ingestion: Ingestion can result in gastrointestinal distress, with abdominal pain, lethargy, nausea, vomiting, diarrhea, blood chemistry effects, cardiac effects, and central nervous system effects.
Eye: May cause irritation, redness, and pain.
Skin: Irritation.
Inhalation: Irritation.
Carcinogenicity: IARC, NTP, and OSHA do not list as a carcinogen.

Medical Conditions Aggravated by Long-term Exposure: Unknown

Chronic Effects: Repeated or prolonged exposure to some ingredients can produce target organ damage.

Other: None

First Aid Measures

Ingestion: Give several glasses of water for dilution, and encourage vomiting. If symptoms persist seek medical attention.

Eye Contact: Do not allow victim to rub or keep eyes tightly shut. Remove contact lenses then gently lift eyelids and flush immediately and continuously with flooding amounts of water for at least 15 minutes. Consult a physician or ophthalmologist if pain or irritation develops.

Skin Contact: Wash exposed area with soap and water. For reddened or blistered skin, consult a physician.

Inhalation: Remove exposed person to fresh air and support breathing, if necessary. Consult a physician as soon as possible.

Fire and Explosion Data

Flash Point: Unknown
Auto-Ignition Temperature: Unknown
LEL: Unknown
Flammability classification: Mother Plant® B is not combustible.
Burning Rate: Mother Plant® B is not combustible.
Extinguishing Media: Use dry chemical, carbon dioxide, water spray, fog, or foam for extinguishing surrounding fire.
Unusual Fire or Explosion Hazards: Container may explode in heat of fire.
Hazardous Combustion Products: Phosphorous oxides may form when heated to decomposition.
Fire Fighting Instructions: Keep fire exposed containers cool with water spray. Remove containers from the fire area, if it can be done safely. Do not release run-off from fire control methods to sewers or waterways.
Fire Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece.

Accidental Release Measures

Spill/Leak Procedures: Wipe up with absorbent towels or mop.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Handling and Storage

Handling Precautions: Avoid ingestion, skin contact, eye contact, and inhalation
Storage Requirements: Keep in tightly closed containers stored in a cool, dry ventilated area.

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Eye Protection: When handling MotherPlant® B protective eyewear r goggles should be worn per OSHA regulations (29 CFR 1910.134). Contact lenses pose a special hazard. Soft lenses may absorb irritants, and all contact lenses concentrate irritants. Particles may adhere to contact lenses and cause corneal damage.

Protective Clothing: Wear, when the possibility of skin or clothing contamination may exist. Wear neoprene or nitrile gloves when directly handling the product.

Safety Stations: Eye wash stations, quick drench showers, and washing facilities should be readily accessible to workers handling large quantities of MotherPlant® B.

Contaminated Equipment: Remove this material from shoes and equipment. Launder contaminated clothing before wearing.

Physical and Chemical Properties

Appearance: Yellowish to brown liquid

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Solubility: Fully soluble

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Health Effects: Due to low pH and concentrated mineral salts, some people may suffer irritation from exposure to skin/eyes or through ingestion

Disposal Considerations: Follow Federal, State, and local regulations

Transport Information: Not Regulated

Regulatory Info: EPA regulations not listed.