Safety Data Sheet
acc. to OSHA HCS

Printing date 03/20/2023 Reviewed on 11/07/2022

1 Identification

Product identifier

Trade name: HGV Growth Formula

Application of the substance / the mixture Fertilizer
Uses advised against None

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
HGV Opco LLC
1730 S. Federal Hwy., Suite 274
Delray Beach, FL 33483
1 (213) 669-6877

Emergency telephone number Chemtrec 1-800-424-9300 CCN: 1014486

2 Hazard(s) identification

Classification of the substance or mixture


GHS07

Skin Irritation 2	H315 Causes skin irritation.
Eye Irritation 2A	H319 Causes serious eye irritation.
Specific Target Organ Toxicity - Single Exposure 3	H335 May cause respiratory irritation.

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms


GHS07

Signal word Warning
Hazard-determining components of labeling:
potassium nitrate
Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

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Precautionary statements

P220	Keep away from combustible materials.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / eye protection / face protection.
P302+P352	If on skin: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a poison center/doctor if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment The components in this formulation do not meet the criteria for classification as PBT or vPvB.

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization:

Hazardous components:	
CAS: 10034-99-8	Magnesium sulfate heptahydrate Consisting of: 7487-88-9 magnesium sulphate (48.8%); 7732-18-5 water (51.2%)
CAS: 7757-79-1	potassium nitrate Oxidizing Solids 2, H272 Skin Irritation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335
CAS: 7778-77-0	Monobasic potassium phosphate
CAS: 7778-80-5	potassium sulfate
CAS: 7631-99-4	Sodium nitrate Oxidizing Solids 2, H272 Skin Irritation 2, H315; Eye Irritation 2A, H319
CAS: 15708-41-5	Ferric EDTA, Sodium Salt
CAS: 12280-03-4	disodium octaborate tetrahydrate Toxic to Reproduction 1B, H360

Additional information:

In accordance with paragraph (i) of §1910.1200, the exact percentage (concentration) of composition of the mixture ingredients has been withheld as a trade secret.

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4 First-aid measures

Description of first aid measures

After inhalation:
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Avoid breathing dust/fume/gas/mist/vapors/spray
Get medical advice/attention if you feel unwell.
After skin contact:
If on skin: Wash with plenty of soap and water.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
After eye contact:
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
After swallowing:
Do NOT induce vomiting.
Get medical advice/attention if you feel unwell.

Most important symptoms and effects, both acute and delayed
Any additional important symptoms and effects are described in Section 11: Toxicological Information
Indication of any immediate medical attention and special treatment needed First Aid, decontamination, treatment of symptoms.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:
In case of fire: Use water spray to extinguish.
Dry extinguishing powder
Carbon dioxide
Foam

Special hazards arising from the substance or mixture

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
The product itself is not combustible.
Avoid the generation or accumulation of dust as combustible particles can potentially form explosive mixtures with air.
Keep away from combustible materials.

Advice for firefighters

Protective equipment: Wear a self-contained breathing apparatus and chemical resistant suit.

Additional information

Move undamaged containers from immediate hazard area if it can be done safely.
Electrostatic discharge may trigger a dust explosion if sufficient quantities of combustable particle are suspended in air.

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6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation.
Evacuate area. Use appropriate personal protective equipment (see Section 8). Stop or contain leak at the source and remove sources of ignition, if safe to do so. Keep upwind of spill.

Environmental precautions: Collect spillage.

Methods and material for containment and cleaning up:
With a shovel and scoop, place material into clean, dry container. Move containers from spill area. Minimize airborne particulates.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

Precautions for safe handling:
Point source exhaust recommended to remove airborne dust particles during use. Avoid sources of ignition, e. g. heat, flames or electrostatic charges, or use explosion proof motors where needed. Avoid contact with eyes and repeated or prolonged contact with skin. Wash hands thoroughly after handling. Keep away from food or drinking water.
Ensure adequate ventilation.
Wear personal protective equipment. See section 8.
Prevent formation of dust.
Information about protection against explosions and fires:
Control build-up of dust and eliminate sources of ignition, e.g. open flames, sparks, or electrostatic discharges, or use explosion proof motors where needed.

Conditions for safe storage, including any incompatibilities
Information about storage in one common storage facility:
Keep away from food, drink and animal feeding stuffs.
Store away from incompatible materials. See Section 10.
Store locked up.
Further information about storage conditions:
Collect spillage.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems:
Technical measures and the application of adequate working methods take priority over the use of personal protection equipment.

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Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Control parameters

Components with limit values that require monitoring at the workplace:
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

CAS: 10034-96-5 Manganese sulphate monohydrate	
PEL	Ceiling limit value: 5 mg/m³ as Mn
REL	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³ as Mn
TLV	Long-term value: 0.02* 0.1** mg/m³ as Mn; A4, *respirable **inhalable fraction

Regulatory information
PEL: Guide to Occupational Exposure Values (OSHA PELs)
REL: Guide to Occupational Exposure Values (NIOSH RELs)
TLV: Guide to Occupational Exposure Values (TLV)

Regulatory information
Monitoring of substance concentrations in air at the workplace may be necessary to ensure compliance with official exposure limit values and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. For further information contact the supplier or the competent authorities.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:
General protective and hygienic measures:
Follow good industrial hygiene practices.
Do not eat, drink or smoke when using this product.
Launder contaminated work clothing separate from regular laundry.

Breathing equipment:
Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator where indicated by your risk assessment process.

Protection of hands:
Material of gloves chemical resistant gloves
Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses

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Body protection:
Wear protective clothing as necessary to minimize prolonged skin contact. Selection of specific items will depend on task.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:	
Form:	Granulate
Color:	Colorless to yellow
Odor:	No characteristic odor
Odor threshold:	Not determined.

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not applicable.
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with	
Water:	Soluble.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.

Other information No further relevant information available.

10 Stability and reactivity

Reactivity The product is stable under standard conditions (temperature, pressure) of storage and handling.
Chemical stability The product is stable under standard conditions (temperature, pressure) of storage and handling.
Possibility of hazardous reactions
As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.
Acts as an oxidizing agent on organic materials such as wood, paper and fats.

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Conditions to avoid
Avoid extremely high heat, fire, and active metal.
Avoid the accumulation of dust in the work area.

Incompatible materials: Combustible/ flammable materials

Hazardous decomposition products:
In case of fire, the following can be released:
Nitrogen oxides (NOx)
Phosphorus oxides (POx)
Sulfur oxides (SOx)

11 Toxicological information

Information on toxicological effects
Acute toxicity:

LD/LC50 values:		
CAS: 7757-79-1 potassium nitrate		
Oral	LD50	3,750 mg/kg (rat)
CAS: 7778-77-0 Monobasic potassium phosphate		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rab)
CAS: 7778-80-5 potassium sulfate		
Oral	LD50	>2,000 mg/kg (rat) (OECD 425)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)
CAS: 7631-99-4 Sodium nitrate		
Oral	LD50	3,236 mg/kg (rat)
CAS: 7447-40-7 potassium chloride		
Oral	LD50	2,600 mg/kg (rat)
CAS: 7446-19-7 Zinc Sulphate Heptahydrate		
Oral	LD50	1,710 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)
CAS: 10043-35-3 boric acid		
Oral	LD50	>2,600 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50	>2.12 ppm (rat) (4h)
CAS: 7758-09-0 potassium nitrite		
Oral	LD50	200 mg/kg (rabbit)

Skin Corrosion/Irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye irritation.
Sensitization: Based on available data, the classification criteria are not met.

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US

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer)
None of the ingredients is listed.

NTP (National Toxicology Program)
None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

Germ cell mutagenicity Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
STOT-single exposure: May cause respiratory irritation.
STOT-repeated exposure: Based on available data, the classification criteria are not met.

12 Ecological information

Toxicity

Aquatic toxicity:	
CAS: 7778-77-0 Monobasic potassium phosphate	
NOEC	200 mg/l mg/L (Hyla chrysoscelis) (15d)
LC50	92 mg/L (Dreissena polymorphia) (24h)
CAS: 7778-80-5 potassium sulfate	
EC50	2,700 mg/L (Chlorella vulgaris) (18d)
LC50	720 mg/L (Daphnia magna) (48h)
	680 mg/L (Pimephales promelas) (96h)
CAS: 15708-41-5 Ferric EDTA, Sodium Salt	
NOEC	69.9 mg/L (Pseudokirchneriella subcapitata)
96h LC50	>100 mg/L (Oncorhynchus mykiss)
48h EC50	100.9 mg/L (Daphnia magna)
CAS: 7446-19-7 Zinc Sulphate Heptahydrate	
IC50	136 mg/L (Pseudokirchneriella subcapitata) (OECD 201, 72h)
LC50	169 mg/L (Ceriodaphnia dubia) (48h)
	500 mg/L (Pimephales promelas) (96h)
CAS: 10043-35-3 boric acid	
EC50	>175 mg/L (activated sludge) (3h)
	66 mg/L (Phaeodactylum tricornutum) (72h)
LC50	102 mg/L (Ceriodaphnia dubia) (48h)

Persistence and degradability No further relevant information available.
Bioaccumulative potential No further relevant information available.

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Mobility in soil No further relevant information available.

Ecotoxical effects:

General notes: Toxic for aquatic organisms.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN-Number
DOT, IMDG, IATA Not applicable

UN proper shipping name
DOT, IMDG, IATA Not applicable

Transport hazard class(es)

DOT, IMDG, IATA
Class Not applicable

Packing group
DOT, IMDG, IATA Not applicable

Environmental hazards: Not applicable.

Special precautions for user Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not determined

UN "Model Regulation": Not applicable

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15 Regulatory information

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Hazardous Air Pollutants

None of the ingredients is listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

National regulations: National legislation has to be observed!

16 Other information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not valid for the new made-up material.

Training hints

The product should only be handled by persons, who were informed sufficiently about the nature of the product and about the necessary safety precautions.

Date of preparation / last revision 11/07/2022 / 03/20/2023

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Oxidizing Solids 2: Oxidizing solids – Category 2
Skin Irritation 2: Skin corrosion/irritation – Category 2
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

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Toxic to Reproduction 1B: Reproductive toxicity – Category 1B
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

Sources Data arise from reference works and literature.