

Safety Data Sheet
Created according to GHS

Printing date 07/10/2023

Reviewed on 07/10/2023

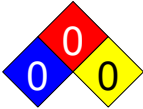
1 Identification

- **Product identifier**
- **Trade name:** Rhizovator
- **Article number:** DAUP0058
- **Application of the substance / the mixture**
The substance is intended to be used as fertiliser, plant growth stimulant and soil conditioner.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Omnia Specialties, Inc.
9605 W 49th Ave Ste 201
Wheat Ridge
CO 80033
Afterhours and toll-free number: (800)760-8402
Office number: (720) 932-1610
- **Information department:**
info@omniausa.org
+1-800-760-8402
- **Emergency telephone number:** ChemTrec 1-800-262-8200 Available 24/7

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Information pertaining to particular dangers for man and environment:**
May slightly irritate skin, may irritate eyes and may irritate the intestinal tract. Release into natural water systems in large quantities may harm aquatic life.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**

	Health = 0
	Fire = 0
	Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**

<table border="1" style="border-collapse: collapse;"><tr><td style="padding: 2px;">HEALTH</td><td align="center" style="padding: 2px;">1</td></tr></table>	HEALTH	1	Health = 1
HEALTH	1		
<table border="1" style="border-collapse: collapse;"><tr><td style="padding: 2px;">FIRE</td><td align="center" style="padding: 2px;">0</td></tr></table>	FIRE	0	Fire = 0
FIRE	0		
<table border="1" style="border-collapse: collapse;"><tr><td style="padding: 2px;">REACTIVITY</td><td align="center" style="padding: 2px;">0</td></tr></table>	REACTIVITY	0	Reactivity = 0
REACTIVITY	0		
- **Other hazards**
Combining with solid oxidizing fertilizers may increase the hazardousness of the fertilizer and result in its classification as explosive material.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:**
Mixture does not contain any products with GHS hazardous classifications above their cutoff limits
- **Dangerous components: Void**

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Product is alkaline and contains small amounts of KOH.
Do not leave affected persons unattended.
Show this safety data sheet to the doctor in attendance
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- **After skin contact:**
Rinse with water immediately.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Rinse opened eye under running water for at least 15 minutes. Get medical attention if irritation persists.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
- **Information for doctor:**
Treat supportive and symptomatically
This product contains potassium hydroxide
- **Most important symptoms and effects, both acute and delayed**
The product is alkaline and may irritate gastro-intestinal tract, eyes and skin.
- **Danger**
Danger of disturbed cardiac rhythm.
Danger of gastric perforation.
- **Indication of any immediate medical attention and special treatment needed** Tachycardia

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
If liquid boils dry, harmful gasses will be produced and resultant dry material may be more combustible
- **Advice for firefighters**
Once boiled dry material may burn as easily as charcoal and may cause dust explosions.
Do not allow run-off from fire to enter sewers or water ways.
- **Protective equipment:** Wear full protective gear and self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective gear. Do not inhale the material or its combustion products. Go against the wind and keep out of low areas. Evacuate personnel to safe area. Ensure adequate ventilation.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.

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- Prevent from spreading by e.g. damming in.
- **Methods and material for containment and cleaning up:**
When material spilled on soil, material likely to partially enter soil. In this case collect such soil also.
Collect the product mechanically. Deposit in recipient for recuperation.
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

1310-58-3	Potassium Hydroxide	0.18 mg/m ³
6100-05-6	Potassium citrate	30 mg/m ³

· **PAC-2:**

1310-58-3	Potassium Hydroxide	2 mg/m ³
6100-05-6	Potassium citrate	330 mg/m ³

· **PAC-3:**

1310-58-3	Potassium Hydroxide	54 mg/m ³
6100-05-6	Potassium citrate	2,000 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Avoid contact with skin, eyes and clothing.
- **Information about protection against explosions and fires:**
Keep away from sources of ignition - no smoking.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Ensure sufficient ventilation and that space is cool and dry. Ensure eyewash station and safety showers is near workstations. Ensure sufficient fire fighting water is available. Ensure containers stay closed.
Store banded if possible.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:** None.
- **Specific end use(s)** Agricultural

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
Keep out of reach of children
Do not ingest

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· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Wear protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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:**



Tight sealing safety glasses or goggles.

· **Body protection:**



Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	<i>Liquid</i>
Color:	<i>Dark brown</i>
Odor:	<i>Characteristic</i>
Odor threshold:	<i>Not determined.</i>

· **pH-value at 20 °C (68 °F):** *10*

· **Change in condition**

Melting point/Melting range:	<i>Undetermined.</i>
Boiling point/Boiling range:	<i>≥100 °C (≥212 °F)</i>

· **Flash point:** *Not applicable.*

· **Flammability (solid, gaseous):** *Not applicable.*

· **Decomposition temperature:** *Not determined.*

· **Auto igniting:** *Product is not selfigniting.*

· **Danger of explosion:** *Product does not present an explosion hazard.*

· **Explosion limits:**

Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>

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· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	1.09 g/cm ³ (9.09605 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
VOC content:	0.00 % 0.0 g/l / 0.00 lb/gal
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
Reacts with calcium and divalent cations to form sludge
Reacts with acids to form a sludge
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** May dry out and burn with extreme heating.
- **Possibility of hazardous reactions**
High temperatures may ignite
Reacts with strong acids.
- **Conditions to avoid** Incompatibles and extreme temperatures
- **Incompatible materials:** Incompatible with oxidizers, acids, Calcium ions and divalent cations.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide
- **Additional information:**
When heated to dryness dust that may form may result in dust explosions. May burn like charcoal once dry.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
- 68514-28-3 K-HUMATE 26%**
- Oral LD50 >2,000 mg/kg (rat)
 This is an estimated value, based on less than 0.5% KOH in solution
- **Primary irritant effect:**
- **on the eye:** No irritating effect.
- **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**
- None of the ingredients is listed.

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<ul style="list-style-type: none"> · NTP (National Toxicology Program)
<p>None of the ingredients is listed.</p>
<ul style="list-style-type: none"> · OSHA-Ca (Occupational Safety & Health Administration)
<p>None of the ingredients is listed.</p>

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

This material has a high pH and release of large volumes into aquatic systems may raise the pH resulting in harm to aquatic life.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

Humic substances are some of the most recalcitrant forms of soil organic matter and may therefore biodegrade only slowly and may also accumulate in soil. As potassium humate is water soluble, it may be mobile and may leach through soil. The presence of clay material or calcium and other divalent cations, is likely to retard its movement.

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **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:**

If the fertilizer is not contaminated, recycle it. If contaminated, consult with specialists.

Disposal according to local/ official/ national regulations.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

<ul style="list-style-type: none"> · UN-Number 	Void
<ul style="list-style-type: none"> · DOT, ADR, IMDG, IATA 	Void
<ul style="list-style-type: none"> · UN proper shipping name 	Void
<ul style="list-style-type: none"> · DOT, ADR, IMDG, IATA 	Void
<ul style="list-style-type: none"> · Transport hazard class(es) 	Void
<ul style="list-style-type: none"> · DOT, ADR, ADN, IMDG, IATA 	Void
<ul style="list-style-type: none"> · Class 	Void
<ul style="list-style-type: none"> · Packing group 	Void
<ul style="list-style-type: none"> · DOT, ADR, IMDG, IATA 	Void

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- | | |
|--|-----------------|
| · 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 applicable. |
| · UN "Model Regulation": | Void |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

68514-28-3	K-HUMATE 26%	ACTIVE
1310-58-3	Potassium Hydroxide	ACTIVE

- **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.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements** Void

- **Hazard pictograms** Void

- **Signal word** Void

- **Hazard statements** Void

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· Contact:**· Date of preparation / last revision 07/10/2023 / -****· Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

· * Data compared to the previous version altered.

- US -