

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2024

Reviewed on 07/24/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Growth Medium for SLYCPxx
- **Article number:** ND406
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Aqua Solutions, Inc.  
6913 Highway 225  
DEER PARK, TX 77536  
USA  
800-256-2586
- **Information department:**  
Technical Coordinator  
Sherman Nelson [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)  
Technical Coordinator  
Sherman Nelson [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 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** Not Applicable
  - **Hazard pictograms** Not Applicable
  - **Signal word** Not Applicable
  - **Hazard statements** Not Applicable
  - **Precautionary statements**  
If swallowed: Call a poison center/doctor if you feel unwell.  
If on skin: Wash with plenty of water.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
  - **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
- |   |   |   |
|---|---|---|
| 0 | 0 | 0 |
|---|---|---|
- Health = 0  
Fire = 0  
Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**
- |            |   |                |
|------------|---|----------------|
| HEALTH     | 0 | Health = 0     |
| FIRE       | 0 | Fire = 0       |
| REACTIVITY | 0 | Reactivity = 0 |
- **Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.

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· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:** Not Applicable

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	99.909%
CAS: 7757-79-1	Potassium Nitrate	0.041%
CAS: 7631-99-4	Sodium Nitrate	0.013%
CAS: 7778-77-0	Potassium Phosphate Monobasic	0.01%
CAS: 7758-11-4	Potassium Phosphate Dibasic Anhydrous	0.005%
CAS: 9002-18-0	Agar	0.005%
CAS: 7558-79-4	Sodium Phosphate Dibasic Anhydrous	0.003%
CAS: 7681-11-0	Potassium Iodide	0.003%
CAS: 10025-77-1	Ferric Chloride Hexahydrate	0.003%
CAS: 10034-99-8	Magnesium Sulfate Heptahydrate	0.003%
CAS: 7647-14-5	Sodium Chloride	0.002%
CAS: 10035-04-8	Calcium Chloride Dihydrate	0.001%
CAS: 7446-20-0	Zinc Sulfate Heptahydrate	0.001%
CAS: 6381-92-6	Ethylenedinitrilotetraacetic acid, disodium salt	0.001%
CAS: 10034-96-5	Manganese Sulfate Monohydrate	0.0002%
CAS: 68-19-9	cyanocobalamin (Vitamin B 12)	0.0001%
CAS: 1308-38-9	Chromium (III) Oxide 99.995%	0.0001%
CAS: 7446-08-4	selenium dioxide	0.0001%
CAS: 7758-99-8	Cupric Sulfate Pentahydrate	0.0001%
CAS: 7791-13-1	Cobalt Chloride Hexahydrate	0.0001%
CAS: 10043-35-3	boric acid	0.0001%
CAS: 10102-40-6	Sodium Molybdate Dihydrate	0.0001%
CAS: 13446-34-9	Manganese Chloride	0.0001%
CAS: 101712-19-0	2'3'Difluoropropiophenone	0.0001%

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.
- **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:**

CAS: 7757-79-1	Potassium Nitrate	9 mg/m <sup>3</sup>
CAS: 7631-99-4	Sodium Nitrate	4.1 mg/m <sup>3</sup>
CAS: 7778-77-0	Potassium Phosphate Monobasic	9.6 mg/m <sup>3</sup>
CAS: 7758-11-4	Potassium Phosphate Dibasic Anhydrous	13 mg/m <sup>3</sup>
CAS: 7681-11-0	Potassium Iodide	1.3 mg/m <sup>3</sup>
CAS: 10025-77-1	Ferric Chloride Hexahydrate	15 mg/m <sup>3</sup>
CAS: 10034-99-8	Magnesium Sulfate Heptahydrate	33 mg/m <sup>3</sup>
CAS: 10035-04-8	Calcium Chloride Dihydrate	16 mg/m <sup>3</sup>
CAS: 7446-20-0	Zinc Sulfate Heptahydrate	27 mg/m <sup>3</sup>
CAS: 6381-92-6	Ethylenedinitrilotetraacetic acid, disodium salt	30 mg/m <sup>3</sup>
CAS: 10034-96-5	Manganese Sulfate Monohydrate	9.2 mg/m <sup>3</sup>
CAS: 1308-38-9	Chromium (III) Oxide 99.995%	2.2 mg/m <sup>3</sup>
CAS: 7446-08-4	selenium dioxide	0.84 mg/m <sup>3</sup>
CAS: 7758-99-8	Cupric Sulfate Pentahydrate	12 mg/m <sup>3</sup>
CAS: 7791-13-1	Cobalt Chloride Hexahydrate	0.24 mg/m <sup>3</sup>
CAS: 10043-35-3	boric acid	6 mg/m <sup>3</sup>
CAS: 10102-40-6	Sodium Molybdate Dihydrate	3.8 mg/m <sup>3</sup>
CAS: 13446-34-9	Manganese Chloride	11 mg/m <sup>3</sup>

- **PAC-2:**

CAS: 7757-79-1	Potassium Nitrate	100 mg/m <sup>3</sup>
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CAS: 7631-99-4	Sodium Nitrate	45 mg/m <sup>3</sup>
CAS: 7778-77-0	Potassium Phosphate Monobasic	110 mg/m <sup>3</sup>
CAS: 7758-11-4	Potassium Phosphate Dibasic Anhydrous	140 mg/m <sup>3</sup>
CAS: 7681-11-0	Potassium Iodide	100 mg/m <sup>3</sup>
CAS: 10025-77-1	Ferric Chloride Hexahydrate	39 mg/m <sup>3</sup>
CAS: 10034-99-8	Magnesium Sulfate Heptahydrate	13 ppm
CAS: 10035-04-8	Calcium Chloride Dihydrate	170 mg/m <sup>3</sup>
CAS: 7446-20-0	Zinc Sulfate Heptahydrate	170 mg/m <sup>3</sup>
CAS: 6381-92-6	Ethylenedinitrilotetraacetic acid, disodium salt	330 mg/m <sup>3</sup>
CAS: 10034-96-5	Manganese Sulfate Monohydrate	15 mg/m <sup>3</sup>
CAS: 1308-38-9	Chromium (III) Oxide 99.995%	61 mg/m <sup>3</sup>
CAS: 7446-08-4	selenium dioxide	1.6 mg/m <sup>3</sup>
CAS: 7758-99-8	Cupric Sulfate Pentahydrate	32 mg/m <sup>3</sup>
CAS: 7791-13-1	Cobalt Chloride Hexahydrate	25 mg/m <sup>3</sup>
CAS: 10043-35-3	boric acid	23 mg/m <sup>3</sup>
CAS: 10102-40-6	Sodium Molybdate Dihydrate	34 mg/m <sup>3</sup>
CAS: 13446-34-9	Manganese Chloride	18 mg/m <sup>3</sup>

**PAC-3:**

CAS: 7757-79-1	Potassium Nitrate	600 mg/m <sup>3</sup>
CAS: 7631-99-4	Sodium Nitrate	270 mg/m <sup>3</sup>
CAS: 7778-77-0	Potassium Phosphate Monobasic	630 mg/m <sup>3</sup>
CAS: 7758-11-4	Potassium Phosphate Dibasic Anhydrous	830 mg/m <sup>3</sup>
CAS: 7681-11-0	Potassium Iodide	620 mg/m <sup>3</sup>
CAS: 10025-77-1	Ferric Chloride Hexahydrate	240 mg/m <sup>3</sup>
CAS: 10034-99-8	Magnesium Sulfate Heptahydrate	81 ppm
CAS: 10035-04-8	Calcium Chloride Dihydrate	1,100 mg/m <sup>3</sup>
CAS: 7446-20-0	Zinc Sulfate Heptahydrate	1,000 mg/m <sup>3</sup>
CAS: 6381-92-6	Ethylenedinitrilotetraacetic acid, disodium salt	2,000 mg/m <sup>3</sup>
CAS: 10034-96-5	Manganese Sulfate Monohydrate	90 mg/m <sup>3</sup>
CAS: 1308-38-9	Chromium (III) Oxide 99.995%	370 mg/m <sup>3</sup>
CAS: 7446-08-4	selenium dioxide	9.5 mg/m <sup>3</sup>
CAS: 7758-99-8	Cupric Sulfate Pentahydrate	190 mg/m <sup>3</sup>
CAS: 7791-13-1	Cobalt Chloride Hexahydrate	150 mg/m <sup>3</sup>
CAS: 10043-35-3	boric acid	830 mg/m <sup>3</sup>
CAS: 10102-40-6	Sodium Molybdate Dihydrate	210 mg/m <sup>3</sup>
CAS: 13446-34-9	Manganese Chloride	290 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 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:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
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:** Goggles recommended during refilling.
  - **Body protection:** Protective work clothing

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Clear
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined.

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· <b>pH-value at 20 °C (68 °F):</b>	6.8
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	0 °C (32 °F)
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Ignition temperature:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure at 20 °C (68 °F):</b>	23 hPa (17.3 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	1 g/cm <sup>3</sup> (8.345 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Water:</b>	99.9 %
<b>VOC content:</b>	0.00 %
	0.0 g/l / 0.00 lb/gal
<b>Solids content:</b>	0.1 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

CAS: 1308-38-9	Chromium (III) Oxide 99.995%	3
CAS: 7446-08-4	selenium dioxide	3
CAS: 7791-13-1	Cobalt Chloride Hexahydrate	2B

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

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

- **Behavior in environmental systems:**

- **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:** Smaller quantities can be disposed of with household waste.

- **Uncleaned packagings:**

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

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

## 14 Transport information

· <b>UN-Number</b>	
· <b>DOT, ADN, IMDG, IATA</b>	Not regulated
· <b>UN proper shipping name</b>	
· <b>DOT, ADN, IATA</b>	Not regulated
· <b>IMDG</b>	Not Regulated Not regulated
· <b>Transport hazard class(es)</b>	
· <b>DOT, ADN, IMDG, IATA</b>	
· <b>Class</b>	Not regulated
· <b>Packing group</b>	
· <b>DOT, IMDG, IATA</b>	Not regulated
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Not regulated

## 15 Regulatory information

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

· **Sara**

· <b>Section 355 (extremely hazardous substances):</b>	
None of the ingredients is listed.	
· <b>Section 313 (Specific toxic chemical listings):</b>	
CAS: 7757-79-1	Potassium Nitrate
CAS: 10034-96-5	Manganese Sulfate Monohydrate
CAS: 1308-38-9	Chromium (III) Oxide 99.995%
CAS: 7446-08-4	selenium dioxide
CAS: 7758-99-8	Cupric Sulfate Pentahydrate
CAS: 7791-13-1	Cobalt Chloride Hexahydrate
CAS: 13446-34-9	Manganese Chloride
· <b>TSCA (Toxic Substances Control Act):</b>	
Water	ACTIVE
Potassium Nitrate	ACTIVE
Sodium Nitrate	ACTIVE
Potassium Phosphate Monobasic	ACTIVE

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Potassium Phosphate Dibasic Anhydrous	ACTIVE
Agar	ACTIVE
Sodium Phosphate Dibasic Anhydrous	ACTIVE
Potassium Iodide	ACTIVE
Sodium Chloride	ACTIVE
cyanocobalamin (Vitamin B 12)	ACTIVE
Chromium (III) Oxide 99.995%	ACTIVE
selenium dioxide	ACTIVE
boric acid	ACTIVE

· **Hazardous Air Pollutants**

CAS: 10034-96-5	Manganese Sulfate Monohydrate
CAS: 1308-38-9	Chromium (III) Oxide 99.995%
CAS: 7446-08-4	selenium dioxide
CAS: 7791-13-1	Cobalt Chloride Hexahydrate

· **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)**

CAS: 7446-20-0	Zinc Sulfate Heptahydrate	D, I, II
CAS: 10034-96-5	Manganese Sulfate Monohydrate	D
CAS: 1308-38-9	Chromium (III) Oxide 99.995%	D, CBD
CAS: 7446-08-4	selenium dioxide	D
CAS: 10043-35-3	boric acid	I (oral)
CAS: 13446-34-9	Manganese Chloride	D

· **TLV (Threshold Limit Value)**

CAS: 1308-38-9	Chromium (III) Oxide 99.995%	A4
CAS: 10043-35-3	boric acid	A4

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

None of the ingredients is listed.

· **GHS label elements** Not Applicable

· **Hazard pictograms** Not Applicable

· **Signal word** Not Applicable

· **Hazard statements** Not Applicable

· **Precautionary statements**

If swallowed: Call a poison center/doctor if you feel unwell.

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*If on skin: Wash with plenty of water.*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **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.*

· **Department issuing SDS:** Environment protection department.

· **Contact:**

*Date of Preparation / Last Revision:*

· **Date of preparation / last revision**

*Revision 1.2, 07-24-2024: Reviewed SDS for accuracy. STN/GW  
07/24/2024 / 1.1*

· **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)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*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.**