

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 09/27/2017

Reviewed on 09/27/2017

1 Identification

- **Product Identifier**
- **Trade name:** Biocozyme
- **Relevant identified uses of the substance or mixture and uses advised against:** Fertilizer
- **Product Description** Fertilizer
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Grow More
15600 New Century Drive
Gardena, CA 90248
(310) 515-1700
www.growmore.com
- **Emergency telephone number:** (310) 515-1700

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye 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 Hydroxide

Phosphoric acid

- **Hazard statements:**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

- **Precautionary statements:**

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P302+P352 If on skin: Wash with plenty of water.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

- **Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.

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- **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

- **Non-hazardous components:**

7732-18-5	Water, distilled water, deionized water	90-99%
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- **Chemical characterization: Mixtures**

- **Description:** Mixture of substances listed below with non-hazardous additions.

- **Dangerous Components:**

CAS: 7664-38-2 RTECS: TB 6300000	Phosphoric acid	 Met. Corr.1, H290; Skin Corr. 1B, H314	2-12%
CAS: 1310-58-3 RTECS: TT 2102000	Potassium Hydroxide	 Skin Corr. 1A, H314;  Acute Tox. 4, H302	2-12%

- **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

*** 4 First-Aid Measures**

- **Description of first aid measures:**

- **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.
If skin irritation occurs, consult a doctor.

- **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:** If swallowed and symptoms occur, consult a doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

- **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.

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Trade name: Biocozyme**· Advice for firefighters:****· Protective equipment:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

*** 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:

Ensure adequate ventilation.

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the collected material according to regulations.

· 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:**

7664-38-2	Phosphoric acid	3 mg/m3
1310-58-3	Potassium Hydroxide	0.18 mg/m3

· PAC-2:

7664-38-2	Phosphoric acid	30 mg/m3
1310-58-3	Potassium Hydroxide	2 mg/m3

· PAC-3:

7664-38-2	Phosphoric acid	150 mg/m3
1310-58-3	Potassium Hydroxide	54 mg/m3

*** 7 Handling and Storage****· Handling****· Precautions for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires: No special measures required.**· Conditions for safe storage, including any incompatibilities:****· Storage****· Requirements to be met by storerooms and receptacles:** Store in a cool, dry place.**· Information about storage in one common storage facility:** Not required.**· Further information about storage conditions:** Keep receptacle tightly sealed.**· 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.

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Trade name: Biocozyme· **Control parameters:**· **Components with occupational exposure limits:****7664-38-2 Phosphoric acid**

PEL	Long-term value: 1 mg/m ³
REL	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
TLV	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³

1310-58-3 Potassium Hydroxide

REL	Ceiling limit value: 2 mg/m ³
TLV	Ceiling limit value: 2 mg/m ³

· **Additional information:** The lists that were valid during the creation of this SDS were used as basis.· **Exposure controls:**· **Personal protective equipment:**· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Wash hands before breaks and at the end of work.

Keep away from foodstuffs, beverages and feed.

Avoid contact with the eyes and skin.

· **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.

Select glove material based on penetration times, rates of diffusion and 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 cannot 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 determined and observed by the manufacturer of the protective gloves.

· **Eye protection:**

Tightly sealed goggles

* **9 Physical and Chemical Properties**· **Information on basic physical and chemical properties**· **General Information**· **Appearance:****Form:**

Liquid

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· Color:	Brown
· Odor:	Earthy
· Odor threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	≥100 °C (≥212 °F)
· Flash point:	None
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	Not applicable. Not applicable
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure @ 20 °C (68 °F):	≤23 hPa (≤17.3 mm Hg)
· Density:	
Relative density:	Not determined.
Vapor density:	Not determined.
Evaporation rate:	Not determined.
· Solubility in / Miscibility with:	
Water:	Soluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Water:	91.3 %
VOC content:	0.00 %
Solids content:	8.8 %
· Other information:	No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **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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Trade name: Biocozyme*** 11 Toxicological Information**· **Information on toxicological effects:**· **Acute toxicity:**· **LD/LC50 values that are relevant for classification:****7664-38-2 Phosphoric acid**

Oral	LD50	>5,000 mg/kg (Rat) (OECD Test Guideline 423)
Dermal	LD50	2,740 mg/kg (Rabbit)
Remarks: Behavioral: Somnolence (general depressed activity). Behavioral: Excitement.		

1310-58-3 Potassium Hydroxide

Oral	LD50	273 mg/kg (Rat)
Inhalative	LC50/96 hours	80 mg/l (Daphnia)

· **Primary irritant effect:**· **On the skin:** Irritating effect· **On the eye:** Irritating effect.· **Additional toxicological information:**· **Carcinogenic categories:**· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

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

None of the ingredients are listed.

12 Ecological Information· **Toxicity:**· **Aquatic toxicity:****7664-38-2 Phosphoric acid**

EC50	4.6 mg/l (Daphnia)
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· **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:**

Do not allow undiluted product or product that has not been neutralized 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.

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Trade name: Biocozyme***13 Disposal Considerations**

- **Waste treatment methods:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

- **UN-Number:**
- **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR/ADN, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **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":** Non-Regulated Material

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

Section 355 (extremely hazardous substances):	
None of the ingredients are listed.	
Section 313 (Specific toxic chemical listings):	
7664-38-2	Phosphoric acid
TSCA (Toxic Substances Control Act):	
7664-38-2	Phosphoric acid
1310-58-3	Potassium Hydroxide
7732-18-5	Water, distilled water, deionized water
California Proposition 65:	
Chemicals known to cause cancer:	
None of the ingredients are listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients are listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients are listed.	
Chemicals known to cause developmental toxicity:	
None of the ingredients are listed.	

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Trade name: Biocozyme

· New Jersey Right-to-Know List:		
7664-38-2	Phosphoric acid	
1310-58-3	Potassium Hydroxide	
· New Jersey Special Hazardous Substance List:		
7664-38-2	Phosphoric acid	CO
1310-58-3	Potassium Hydroxide	CO, R1
· Pennsylvania Right-to-Know List:		
7664-38-2	Phosphoric acid	
1310-58-3	Potassium Hydroxide	
· Pennsylvania Special Hazardous Substance List:		
7664-38-2	Phosphoric acid	E
1310-58-3	Potassium Hydroxide	E
· Carcinogenic categories:		
· EPA (Environmental Protection Agency):		
None of the ingredients are listed.		
· TLV (Threshold Limit Value established by ACGIH):		
None of the ingredients are listed.		
· NIOSH-Ca (National Institute for Occupational Safety and Health):		
None of the ingredients are listed.		

· **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 Hydroxide

Phosphoric acid

· **Hazard statements:**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· **Precautionary statements:**

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P302+P352 If on skin: Wash with plenty of water.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

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Trade name: Biocozyme**· National regulations:**

None of the ingredients are listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**16 Other Information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· Date of preparation / last revision: 09/27/2017 / 2**· Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

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 and Health

OSHA: Occupational Safety & Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

· * Data compared to the previous version altered.SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106