MATERIAL SAFETY DATA SHEET

FILE NO.: 003
MSDS DATUM: August 24, 2021

EnzyMas™

1. Identification of the product and the company

Name of product: EnzyMas™
Name distributor: HortiPro BV, KvK 56572174, Phonenumber: (+31) 341 268 639
Product owner: HortiPro BV, Jagerserf 43, 3851 SM, Ermelo, Netherlands
Use: Cleaning of terrasses, plastic, glass, roof etc.

2. Composition and information of the ingredients

· Chemical characterization: Mixtures
· Description: Mixture of substances listed below with nonhazardous additions.
· Dangerous components: Void

Gevaarlijke inhoudstoffen:		
CAS: 102-71-6 EINECS: 203-049-8	- 2,2',2''-nitrilotriethanol	1 – 5%
Regulation (EC) No 648/2004 on detergents / Labelling for contents		
non-ionic surfactants, amphoteric surfactants **Enzymes**		< 5% amount not mentioned

· Additional information:
For the wording of the listed risk phrases refer to section 16.

3. Hazards identification

· Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008
The product is not classified according to the CLP regulation.
· Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
· Information concerning particular hazards for human and environment:
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
· Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
· Label elements
· Labelling according to EU guidelines:
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous

Materials (German GefStoffV).
· Safety phrases:
2 Keep out of the reach of children.
· Other hazards
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

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: Generally the product does not irritate the skin.
· After eye contact: Rinse opened eye for several minutes under running water.
· After swallowing: Rinse out mouth and then drink plenty of water.

5. Firefighting measures

· Extinguishing media
· Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Water
· Advice for firefighters
· Protective equipment: No special measures required.

6. Accidental release measures

· Personal precautions, protective equipment and emergency procedures
Particular danger of slipping on leaked/spilled product.
· Environmental precautions:
Do not allow product to reach sewage system or any water course.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· Methods and material for containment and cleaning up:
Dilute with plenty water.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
· Reference to other sections No dangerous substances are released.

7. Handling and storage

· Handling:
· Precautions for safe handling
Store in cool, dry place in tightly closed receptacles.
No special precautions are necessary if used correctly.

No special measures required.
· Information about fire - and explosion protection: The product is not flammable.
· Conditions for safe storage, including any incompatibilities
· Storage:
· Requirements to be met by storerooms and receptacles:
Store only in unopened original receptacles.
Use polyolefine receptacles.
· Information about storage in one common storage facility: Store away from foodstuffs.
· Further information about storage conditions: Store in a cool place.

8. Exposure controls / personal protection

· Additional information about design of technical facilities: No further data; see item 7.
· Control parameters
· Ingredients 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 valid during the making were used as basis.
· Exposure controls
· Personal protective equipment:
· General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
· Respiratory protection: Not required.
· Protection of hands:
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: Use protective suit.

9. Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
· Appearance:
Form: Fluid

Colour:	transparent, lightly milky
· Odour:	Characteristic
· pH-value at 20°C: 10.5	
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100°C
· Flash point:	Not applicable.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density at 20°C:	1.02 g/cmÑ
· Solubility in / Miscibility withwater:	Fully miscible.

10. Stabilty and reactivity

· Reactivity	
· Chemical stability	
· Thermal decomposition / conditions to be avoided:	Stable at environment temperature.
· Possibility of hazardous reactions:	No dangerous reactions known.
· Hazardous decomposition products:	No dangerous decomposition products known.

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 the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12. Ecological information

· Toxicity
· Acquatic toxicity: No further relevant information available.
· Persistence and degradability
The surfactants contained in the product correspond to the direction on the environmental compatibility of detergents and are biodegradable.
· Additional ecological information:
· General notes:
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of

the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
· Results of PBT and vPvB assessment

· PBT: Not applicable.
· vPvB: Not applicable.

13. Disposal considerations

· Waste treatment methods
· Recommendation
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
Smaller quantities can be disposed of with household waste.
· Uncleaned packaging:
· Recommendation: Packaging may be reused or recycled after cleaning.
· Recommended cleansing agents: Water, if necessary together with cleansing agents.

14. Transport information

· Land transport ADR/RID (cross-border)
· ADR/RID class: -
· Maritime transport IMDG:
· IMDG Class: -
· Marine pollutant: No
· Air transport ICAO-TI and IATA-DGR:
· ICAO/IATA Class: -
· UN "Model Regulation": -
· Special precautions for user Not applicable.

15. Regulatory information

- Danger for water bodies:	WGK 1 (D) (Self clasification): low hazard for water
- 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 MSDS: Product safety department
· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International
Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of ChemicalsICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
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