

Material Safety Data Sheet

WHC Amylase Enzyme

1. PRODUCT AND COMPANY DETAILS

Product

Name of Product: WHC Amylase Enzyme

UFI: QNA0-N03T-600X-U15V

Relevant uses:

Food additive

Uses advised against:

All uses not specified in this section or in section 7.3

Details of the supplier of the safety data sheet

Name of Company: WHC Lab Ltd.

Address: WHC Lab, Prospect Lower, Newcastle, Co. Wicklow, Ireland, A63 H0K8

Emergency Contact Numbers

Managing Director: Tony O'Kane: +353 87 948 3590

Technical Director: Philip Woodnutt: +353 89 406 8622

Plant Manager: Farrokh Farrokh Pour: +353 87 375 4880

Sales Director: Pete Garraway: +44 779 658 5387

In case of an emergency please contact the local emergency services.

2. HAZARDS

Classification (CLP Regulation EC 1272/2008):

Respiratory sensitizer (H334): May cause allergy or asthma symptoms or breathing difficulties if inhaled.



Label elements:

- Danger
- Hazard statements: H334
- Precautionary statements: P101, P102, P261, P284, P304+P340, P342+P311, P501

Other hazards:

- Does not meet PBT/vPvB criteria
- No endocrine-disrupting properties

3. INGREDIENT COMPOSITION

Chemical characterization:

Mixture of substances

Classification: Resp. Sens. 1 (H334)



Components	UFI Number	CAS Number	Concentration
Amylase, α - ⁽¹⁾	QNA0-N03T-600 X-U15V	9000-90-2	15 to 20%
Water	-	-	45 to 55%
Maltodextrin	-	-	12 to 15%
Sodium chloride	-	-	10 to 15%
Sodium acetate	-	-	5%

4. FIRST AID PROCEDURES

Description of first aid procedures	
Contact with Eyes:	Rinse opened eye for at least 15 minutes under lukewarm running water; do not rub eye
Contact with Skin:	Wash thoroughly with water and neutral soap; seek medical advice if skin changes occur
Ingestion:	Seek immediate medical assistance, show Safety Data Sheet
Inhalation:	Remove affected person to fresh air, keep comfortable, seek medical attention if symptoms persist or in serious cases

5. FIRE FIGHTING MEASURES

Fire Suppression
Suitable Extinguishing Media: Use powder extinguishers (ABC powder).
Unsuitable Extinguishing Media: None specified.
Specific risks associated with the substance
Combustion or thermal decomposition can produce highly toxic gases, posing serious health risks.
Advice for fire fighters
<ul style="list-style-type: none"> - Wear full protective clothing and respiratory equipment based on the fire's extent. - Cool storage containers with water to prevent explosions or fire spread. - Avoid environmental contamination and prevent the release of extinguishing water into water sources.

6. ACCIDENTAL RELEASE CONTROLS

Safety measures, protective gear, and emergency procedures
<ul style="list-style-type: none"> - Isolate leaks if safe to do so. - Wear protective gear. - Evacuate and keep unprotected persons away.
Environmental precautions
Not considered dangerous to the environment but avoid contamination of drains and surface water.
Techniques and supplies for containment and cleanup
<ul style="list-style-type: none"> - Prevent entry into drains or water bodies. - Absorb spill with inert absorbent (e.g., sand). - Collect in suitable containers and dispose of according to regulations. - For water spills, contain and recover product, avoiding dispersants unless authorized.

7. HANDLING AND STORAGE

Packaging Materials

WHC Amylase Enzyme is available in 1kg, 5kg, 10kg and 25kg drums. Keep in original containers.

Storage and Handling

Storage Conditions: It is recommended to keep product in its original unopened packaging in ambient conditions (10°C to 30°C or 50°F to 86°F) to maintain maximum activity. Avoid freezing the product and ensure containers are sealed when not in use. Keep away from heat, radiation, static electricity, and food.

Shelf life: As stated on the pack.

Handling: Store tightly closed, in dry, cool, well-ventilated place, avoid contact with skin and eyes, inhalation of vapors. Transferring should be slow to prevent static. Do not eat, drink, or smoke during handling. Wear personal protective equipment, wash hands after handling.

Please note the expiry date on the drum prior to opening.

8. EXPOSURE CONTROLS

A. Personal Protective Measures, such as Personal Protective Equipment (PPE)

As a precautionary measure, it is recommended to use basic personal protective equipment that complies with the <CE marking>. For more information on PPE (storage, use, cleaning, maintenance, type of protection, etc.), consult the information brochure provided by the PPE manufacturer. The instructions given in this section refer to the pure product. Protection measures for the diluted product may vary depending on its degree of dilution, usage, application method, etc.

To determine the need to install safety showers and/or eye wash stations in warehouses, comply with regulations concerning the storage of chemical products applicable in each case. For additional information, refer to subsections 7.1 and 7.2. All information provided here is a recommendation that requires specific validation from occupational risk prevention services, especially if the company has additional safety measures in place.

B. Respiratory Protection

Pictogram	PPE	Standard markings	ECN	Remarks
 Respiratory protection is mandatory	Self-filtering mask against gases and vapors		EN 405:2002+A1:2010	To be replaced as soon as a smell or taste of the contaminant is detected inside the mask or facepiece. When the contaminant does not present the correct warnings, it is recommended to use isolating equipment.

C. Hand Protection


Pictogram	PPE	Standard markings	ECN	Remarks
 Hand protection is mandatory	Protective gloves against minor risks			Replace gloves if they become damaged. For prolonged exposure to the product, it is recommended that professional/industrial users wear CE Class III gloves, in accordance with standards EN 420 and EN 374.

Since the product is a mixture of different materials, the resistance of the glove material cannot be reliably calculated in advance, and therefore, gloves should be checked before use.



D. Face and Eye Protection

Pictogram	PPE	Standard markings	ECN	Remarks
 <p>Face protection is mandatory</p>	Goggles for splashes/projections		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect regularly following the manufacturer's instructions. To be used in case of splashes risk.

E. Body Protection

Pictogram	PPE	Standard markings	ECN	Remarks
	Work clothing			Replace if signs of deterioration appear. For prolonged exposure to the product by professional/industrial users, it is recommended to use CE III, in accordance with standards EN ISO 6529:2001, EN ISO 6530:2005, EN ISO 13688:2013, and EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2022	Replace if signs of deterioration appear. For prolonged exposure to the product by professional/industrial users, it is recommended to use CE III, in accordance with standards EN ISO 20345 and EN 13832-1.

F. Additional Emergency Measures

Emergency Measures	Standards	Emergency Measures	Standards
 <p>Emergency Shower</p>	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 <p>Eye Wash</p>	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental Protection-Related Exposure Controls:

In accordance with EU environmental protection legislation, it is recommended to avoid any spillage of the product as well as its packaging into the environment. For additional information, see subsection 7.1.D.

Volatile Organic Compounds (VOCs):

According to the application of Directive 2010/75/EU, this product has the following characteristics:

VOC (2010/75/EU): 0% weight

VOC concentration at 20°C: 0 kg/m³ (0 g/L)

Average number of carbon atoms: Not relevant

Average molecular weight: Not relevant

9. PHYSICAL, CHEMICAL AND MICROBIOLOGICAL PROPERTIES

Parameter	Typical Value
Form	Liquid at 20°C
Color	No specific data (not pertinent)
Odor	No specific data (not pertinent)
pH	No specific data (not pertinent)
Melting point	No specific data
Boiling point	No specific data
Flammability	Non-flammable (>60°C flash point)
Decomposition temperature	No specific data
Auto igniting	No specific data
Danger of explosion	No specific data
Vapor pressure at 20°C (68°F)	No specific data
Density at 20°C	1168.8 kg/m ³
Relative density	1.169
Solubility in / Miscibility with Water	No specific data
Dynamic at 25°C (77°F)	No specific data
Kinematic	No specific data
Organic solvents	No specific data

10. STABILITY/REACTIVITY

Conditions to avoid
Heat, shocks, friction, light, humidity
Reactivity
No dangerous reactions expected under normal conditions.
Chemical stability
Stable under recommended storage and handling.
Incompatible materials
Strong acids, alkalis, oxidizers, and combustible materials.
Hazardous decomposition products
Carbon dioxide, carbon monoxide, and organic compounds during combustion.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
General: No specific toxicological data for the mixture. Ingestion: Not classified as acutely toxic; no corrosivity. Inhalation: Not classified as hazardous; may cause respiratory sensitization. Skin and Eye Contact: No hazards identified; eye contact may cause irritation.
Additional toxicological information
Carcinogenicity, Mutagenicity, Reproductive Toxicity: No components classified as carcinogenic, mutagenic, or reprotoxic. Sensitization: Respiratory sensitizer likely; prolonged exposure may cause hypersensitivity.

12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity:

- Fish (pimephales promelas): LC50 4630 mg/L (96h)
- Daphnia magna: EC50 2400 mg/L (48h)
- Algae (Pseudokirchneriella subcapitata): EC50 27000 mg/L (72h)

Behavior in environmental systems:

Bioaccumulative potential: Not considered persistent or bioaccumulative.

Mobility in soil: No further relevant information available.

Additional ecological information:

Not classified as hazardous to the environment.

No significant ecotoxicological hazards.

13. DISPOSAL

Waste treatment methods:

Recommendation:

- Dispose of waste in accordance with local regulations.
- Do not pour into water bodies.
- Use appropriate waste codes; the product is non-hazardous.

Uncleaned packagings:

Recommendation: Rinse containers thoroughly and dispose of as non-hazardous waste.

14. TRANSPORT

Transport Information

UN-Number <i>DOT, ADR, ADN, IMDG, IATA</i>	Void
UN proper shipping name <i>DOT, ADR, ADN, IMDG, IATA</i>	Void
Transport hazard class(es) <i>DOT, ADR, ADN, IMDG, IATA Class</i>	Void
Packing group <i>DOT, ADR, IMDG, IATA</i>	Void
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

Regulatory Information

Legal Regulations:

- Not subject to specific restrictions or classification under major European regulations.
- Cannot be used in decorative items, toys, or certain consumer products.
- Complies with regulations for food additives.

Other Regulations:

- Follow local and international chemical safety and waste disposal laws.
- No specific classification as hazardous under transport or other major legislative frameworks.

16. OTHER INFORMATION

*The information presented here is based on our current understanding.
It describes the product in terms of the necessary safety precautions.
It does not imply that the product's qualities are guaranteed.*

If you have any questions or concerns about our product please contact us at lab@whclab.com