



HARRIS FILTERS PECTINAZE

MATERIAL SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company

Product Name: Pectinaze Pectic Enzyme

Synonyms: liquid pectinase preparation

Formula: not applicable

Company Identification: Harris Filters
42 & 43 Zoar Street
Lower Gornal
Dudley
West Midlands
DY3 2PA, UK
Tel: 01384 253073

2. Composition/Information on ingredients

Substance
Chemical composition: liquid preparation (mixture)

Name	Concentration %	CAS No.	EC No.
Pectinase	1-5%	9032-75-1	CE 232-885-6

3. Hazard Identification



Warning symbols:

Classification: R42 – Sensitizing -

Hazard Statements: H334 – May cause sensitization by inhalation

Precautionary Statements: P261 – Avoid breathing vapours or spray
P284 – Wear respiratory protection
P304/P340– If inhaled move person to fresh air
P342/P311 – If respiratory difficulty experienced, call a poison centre/doctor

Contains: Enzyme protein – Pectinase

Properties affecting health: Inappropriate handling may cause formation of aerosols or dust. Inhalation of aerosols or dust may induce sensitization and may cause allergic reaction in sensitized individuals.

This mixture contains no products considered PBT or vPvB

Physical/Chemical hazards: The data available does not support any physical or chemical hazards.

4. First Aid Measures

Inhalation:	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms/difficulty breathing, seek medical advice.
Ingestion:	Wash mouth with water immediately. Do not induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, seek immediate medical attention.
Eye Contact:	Rinse immediately and copiously with clean, fresh water for at least 15 minutes, keeping eyelids opened.
Skin Contact:	Remove contaminated clothing and wash them before using them again. Wash with plenty of water and soap. In case of irritation attributable to the product seek medical attention.

Most important symptoms and effects, both acute and delayed:

No information available

Indication of any immediate medical attention and special treatment needed:

May cause allergic respiratory reaction

5. Fire Fighting Measures

Fire extinguishing media:	CO ₂ , foam, chemical powder, nebulized water.
Special hazards from the mixture	May cause sensitization by inhalation. Oxides of carbon and nitrogen. Toxic pyrolysis products
Advice for firefighters:	Wear the self-contained breathing apparatus and full protection equipment in case of fire, all the time. Water used in fire-fighting has to be disposed following local regulation. Avoid high volume water jet.

6. Accidental Release Measures

Personal Precautions:	Use only with adequate ventilation/personal protection. Avoid breathing spray. Avoid formation of aerosols. In case of risk of aerosols, use an adequate respiratory protection (P3)
Environmental Precautions:	Collect the product in suitable container for disposal. Prevent further leakage or spillage. Do not allow to enter natural waters or soil, but notify authorities if product enters sewer or public waters.
Methods for Cleaning:	Use appropriate personal protection (see Section 8). Contain spilt product. Wash away with low pressure water supply. Do not use high pressure hose due to risk of aerosols. After spillage avoid raising aerosols or dust from dried preparation. Avoid splashing and high pressure washing (aerosols formation). Provide for sufficient ventilation. Wash with plenty of water. Place contaminated material into suitable containers and send them for waste disposal.

7. Handling & Storage

Handling:	Avoid formation and breathing of dust or spray mist and direct contact with the product. Use appropriate protection Handle
-----------	--

according to the good industrial hygiene and safety procedures. Do not smoke, eat or drink during the working processes. Supply good air circulation in working area.

Storage: Keep container tightly closed in a fresh (5-25°C) and well-ventilated place, far from sources of ignition.

8. Exposure Controls/Personal Protection

Exposure Controls: Handle in accordance with good industrial hygiene and safety procedures: do not eat, drink or smoke while handling it. Accurately wash the hands with soap and water before meals. Avoid all unnecessary exposure and prevent contact with skin, eyes and clothing. Regular cleaning of equipment. Ensure adequate ventilation. Equipment should be designed to minimise the escape of aerosols or dust.

Individual protection: The DPI choice must be done on the basis of the test's results obtained according to EN 374

Hand protection: protective gloves (nitrile rubber) complying with EN 374
Eye protection: safety glasses (goggles) with side-shields
Skin and body protection: wear suitable protective clothing
Respiratory protection: maintain adequate ventilation. Certified respirators, with a particle filter P3 (EN 143) or FFP1 are recommended.

Environmental exposure controls: Avoid dispersion to the environment. WEL-TWA 10mg/m³ (glycerine)

9. Physical & Chemical Properties

Physical and chemical properties	Value	Determination method
Appearance	Brown liquid	
Odour	typical of fermentation	
pH	4.2-4.8	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	> 100°C	PMCC
Evaporation rate	not available	
Flammability (solid, gas)	not applicable	
Upper/lower flammability or explosive limits	not applicable	
Vapour pressure	not determined	
Vapour density	not determined	
Density	1.15g.cm ³	
Solubility	soluble in water	
Water solubility	soluble	
Partition coefficient: n-octanol/water	not available	
Auto-ignition temperature	not applicable	
Decomposition temperature	not determined	
Viscosity	not available	
Explosive properties	not determined	
Oxidising properties	not determined	

10. Stability & Reactivity

Reactivity	No data available.
Chemical stability	The product is stable under normal conditions of use and storage.
Possibility of hazardous reactions	Hazardous polymerization does not occur
Conditions to avoid	None known, a part aerosols formation.
Incompatible materials	Avoid contact with other chemicals
Hazardous decomposition products	None known when used as directed

11. Toxicological Information

Product information

Acute toxicity – complete preparation not expected to be toxic by ingestion.

Dermal no data / inhalation no data

Irritation - may cause skin and eye irritation. May cause slight respiratory irritation

Other effects – systemic toxicity (no data); sensitisation (may cause sensitisation by inhalation of enzyme mist/dust which may cause allergic respiratory reactions including asthma in susceptible individuals).

Mutagenic effects – no data available

Carcinogenicity – contains no ingredients listed as carcinogenic

Reproductive effects – contains no known reproductive hazards

Developmental toxicity – not expected to produce developmental or reproductive toxicity

12. Ecological Information

Toxicity: Pectinase enzyme - Not considered toxic to aquatic organisms. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

Glycerine:

Toxicity to fish	LC50	24 hrs	>5000	Mg/l	Carassius auratus
Toxicity to daphnia	EC50	24 hrs	>1000	Mg/l	Daphnia magna
Toxicity to algae	IC5	7 days	>10,000	Mg/l	Selenastrum capricornutum
Persistence and degradability		14 days	63	%	OECD 301C(ready biodegradability modified MITI test (1))
Toxicity to bacteria	EC5	16 hrs	>10,000	Mg/l	Pseudomonas putida
Other information	BOD5		0.87	g/g	
Other information	COD		1.16	g/g	

Persistence and degradability:	Enzymes are considered readily biodegradable.
Bioaccumulative potential:	Bioaccumulation is unlikely.
Mobility in soil:	The product is water soluble and may spread in water systems
Results of PBT and vPvB assessment:	The mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). The mixture contains no substance considered to be verypersistent nor very bioaccumulating (vPvB).
Other adverse effects:	None known

13. Disposal Consideration

Dispose of hazardous waste in compliance with local and national regulations.
 Dispose of in accordance with the European Directives on waste and hazardous waste.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Dispose of in accordance with local regulations.

14. Transport Information

The product is not classified as dangerous (nor regulated) for transport.

Annex II of MARPOL 73/78 and the IBC code dangerous goods – not dangerous goods in the meaning of ADR/RID, ADNR, IMDG code, ICAO/IATA-DGR

15. Regulatory Information

The substance complies with article 16 of regulation 689/2008 on the export and import of hazardous chemical products. It complies with regulation 882/2004 relative to the official controls undertaken to check conformity with the legislation on animal feed and foodstuffs and regulation 178/2002 establishing the general prescriptions of the food legislation instituting the European Food Safety Authority and fixing procedures on the safety of foodstuffs.

Chemical safety assessment: The substance has not been subject to an evaluation of chemical safety

Harris Filters has compiled the information contained in this data sheet to the best of its own knowledge and of available reliable data.

Since the use of our products is beyond our control, no warranty, guarantee or liability arising from the use of this information or the products to which the information refers is expressed or implied.