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Creation Date :- 02-03-2025

Rivision Date :-15-06-2030

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Pectinase Product Code: P 1385 CAS No : 9032-75-1

Use : Industrial. For professional use on 1.3. Details of the supplier of the safety Company identification OTTO CHEMIE PVT LTD 101, Aarkay Ruby Industrial Estate(1B), Chinchpada, Vasai East, Waliv, Mahara Email info@ottokemi.com 1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am	data sheet Opp Shree Narayan Industrial Estate, shtra 401208.			
SECTION 2: Hazards identification 2.1 Classification of the substance or mi	aturo.			
Respiratory sensitization,	H334: May cause allergy or asthma			
(Category 1)	symptoms or breathing difficulties if			
(Gategory T)	inhaled.			
2.2 Label elements				
Labelling according Regulation (EC) No	1272/2008			
Pictogram				
Signal Word	Danger			
Hazard Statements				
H334	May cause allergy or asthma symptoms or breathing difficulties			
	if inhaled.			
Precautionary Statements	none			
Supplemental Hazard	none			
Statements 2.3 Other hazards				
	ponents considered to be either persistent,			
bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.				
Ecological information:				
The substance/mixture does not contain components considered to have endocrine				
disrupting properties according to REACH Article 57(f) or Commission Delegated regulation				
(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.				
Toxicological information:	(), ·			
	components considered to have endocrine			
disrupting properties according to REAC	CH Article 57(f) or Commission Delegated regulation			
(EU) 2017/2100 or Commission Regulat	ion (EU) 2018/605 at levels of 0.1% or higher.			
	· · · · ·			
SECTION 3: Composition/information	i on ingredients			
3.1 Substances	4 er D. galasturanida) gluganahudralasa			
, , , , , , , , , , , , , , , , , , ,	4-α-D-galacturonide) glycanohydrolase			

- ,,	Polygalacturon
CAS-No.	: 9032-75-1
EC-No.	: 232-885-6

Component		Classification	Resp. Sens. 1; H334
pectinase (from	n aspergillus niger)		
CAS-No.	9032-75-1	Resp. Sens. 1; H334	<= 100 %
EC-No.	232-885-6		

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For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures General advice First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance If inhaled After inhalation: fresh air. Call in physician. In case of skin contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower In case of eye contact After eye contact: rinse out with plenty of water. Remove contact lenses. If swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 4.3 Indication of any immediate medical attention and special treatment needed No data available **SECTION 5: Firefighting measures** 5.1 Extinguishing media Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.Water Foam Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Nature of decomposition products not known. Combustible. Development of hazardous combustion gases or vapours possible in the event of fire. 5.3 Advice for firefighters In the event of fire, wear self-contained breathing apparatus, 5.4 Further information Prevent fire extinguishing water from contaminating surface water or the ground water system. **SECTION 6: Accidental release measures** 6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8. 6.2 Environmental precautions Do not let product enter drains. 6.3 Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections For disposal see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling Advice on safe handling Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Hygiene measures Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Tightly closed. Keep locked up or in an area accessible only to qualified or authorized persons. Storage stabilityRecommended storage temperature 2 - 8 °C Storage class Storage class (TRGS 510): 10: Combustible liquids 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated **SECTION 8: Exposure controls/personal protection** 8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Full contact Material: Nitrile rubber Minimum laver thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. **Body Protection** protective clothing Respiratory protection required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory

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protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties a) Physical state b) Color c) Odor d) Melting point/freezing point e) Initial boiling point and boiling range f) Flammability (solid, gas) g) Upper/lower flammability or explosive limits h) Flash point i) Autoignition temperature i) Decomposition temperature k) pH I) Viscosity

m) Water solubility n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature) . 10.3 Possibility of hazardous reactions No data available 10.4 Conditions to avoid no information available 10.5 Incompatible materials Strong oxidizing agents 10.6 Hazardous decomposition products In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L.

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Aqueous solution light brown No data available No data available No data available

No data available

No data available

Not applicable No data available

No data available

No data available Viscosity, kinematic: No data available Viscosity, dynamic: No data available No data available No data available

No data available 1,226 g/cm3 No data available No data available

No data available

No data available none

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Other Toxic Effects on Humar Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic B	CARCINOGENIC EFFECTS: Classifie Is: Hazardous in case of skin contact Effects on Humans: Not available. Ric Effects on Humans: Not available	
SECTION 12: Ecological info 12.1 Toxicity No data available 12.2 Persistence and degrada No data available 12.3 Bioaccumulative potentia No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvE This substance/mixture contai bioaccumulative and toxic (PE levels of 0.1% or higher. 12.6 Endocrine disrupting prop Product: Assessment :	bility B assessment ns no components considered to be T), or very persistent and very bioac perties The substance/mixture do considered to have endoo according to REACH Artic Delegated regulation (EU	es not contain components rine disrupting properties le 57(f) or Commission 2017/2100 or Commission
12.7 Other adverse effects No data available	Regulation (EU) 2018/605	at levels of 0.1% or higher.
SECTION 13: Disposal cons 13.1 Waste treatment method No data available		
SECTION 14: Transport info 14.1 UN number ADR/RID: - 14.2 UN proper shipping name ADR/RID: IMDG: IATA: 14.3 Transport hazard class(e ADR/RID: - 14.4 Packaging group ADR/RID: - 14.5 Environmental hazards ADR/RID: no	IMDG: - e Not dangerous goods Not dangerous goods Not dangerous goods s) IMDG: - IMDG: - IMDG Marine pollutant: no	IATA: - IATA: - IATA: - IATA: no
	the meaning of transport regulations according to IMO instruments	
substance or mixture	ormation nmental regulations/legislation speci t complies with the requirements of f	

Other regulations Take note of Dir 94/33/EC on the protection of young people at work.

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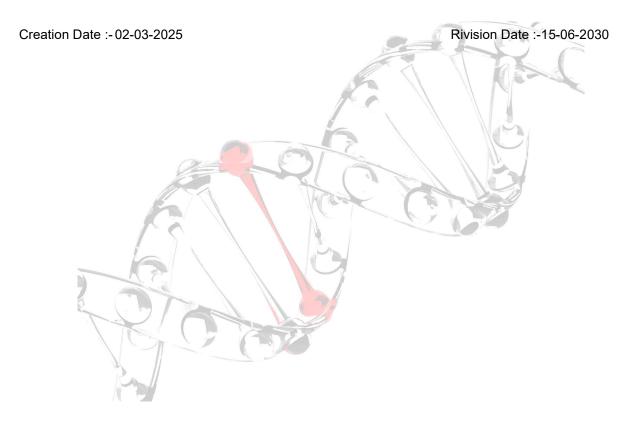
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15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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