

DEGUMMING ENZYME			
MATERIAL SAFETY DATA SHEET			
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SECTION 1 Chemicals and corporate identify			
English name	Degumming enzyme	Model No	GR-M121
CAS NO.	9032-75-1	MSDS NO.	MSDS#201706
Supplier name	Zibo Green Trade Co.,Ltd	Supplier address	Zhoucun textile science and technology five west 18, Zibo city, China.
Supplier tel.	86533-2722853	Supplier fax	86533-2722853
SECTION 2 Risk overview			
Risk category	No transport hazardous		
Invasion pathways	Eyes and skin contact, inhalation		
Health hazards	No detailed toxicological studies. Avoid direct contact, prevent inhalation.		
Explosion hazard	Do not belong to flammable substances.		
SECTION 3 Ingredient/component information			
Ingredient	Compound enzyme. Be developed mainly by alkaline pectinase, includes		

	varieties of hemicellulase components. Main ingredients includes: polygalacturonic acid lyase, pectin lyase, polygalacturonic acid hydrolase, pectin hydrolase, pectin esterase, xylanase, glucanase and so on.
SECTION 4 First aid measures	
Skin contact	Rinse skin absolutely with soap water, see medical advice.
Eye contact	Did eyelid, rinse more than 15 minutes with flowing clean water. If irritation, see medical advice.
Inhalation	Leave exposure place. If breath difficultly or stop breath, artificial respiration, see medical advice.
Ingestion	Gargle with warm water, see medical advice.
SECTION 5 Fire-fighting measures	
Hazardous characteristics	No explosion hazard,not belong to flammable hazardous article,No oxidant hazard,not belong to corrosive,not belong to toxic chemicals.
Hazardous Combustion Products	Carbon monoxide、 carbon dioxide, etc.
Fire extinguishing method and fire extinguishing agent	Water, foam.
Fire extinguishing measures and precautions	Firefighters should wear positive pressure self-contained breathing apparatus, wearing fire protective clothing to prevent skin and eye contact.
SECTION 6 Leakage emergency measures	
Emergency Treatment	Adsorption with inert material (such as dry sand, vermiculite) were collected in a dry, clean, covered containers for disposal. After cleaning ventilation, watering, personnel should wear suitable protective clothing.
SECTION 7 Handling and storage	
Handling notice	Operator should be trained, strictly follow operation procedure. Recommend operator draw general working protective suit, wear safety gloves, avoid direct contact with eyes and skin. Prevent inhalation. Far away from fire, heat, and prohibit smoking in workplace. There is should be ventilation system and equipment. Avoid contact with oxidizing agent, flammable substances. Light loading and unloading when transport, prevent packaging weaken, moisture, and cause loss. Equip relevant types and quantities fire equipments and leakage emergency equipments.

Storage notice	Stored in a cool and dry storehouse. Far away from fire, heat. Keep container be sealed. Should be separately placed with oxidizing agent and flammable substances. Equip relevant types and quantities fire equipments, leakage emergency equipments and proper store materials in storehouse.
SECTION 8 Contact control/personal protection	
Maximum allowable concentration	No formulate standard
Monitoring methods	None
Engineering control	Have ventilation system and equipment. Provide safe shower and eyes washing equipments.
Breath system protection	If necessary, wear masks approved by administration department.
Eyes protection	Wear safety glasses.
Body protection	Wear general working protective cloths.
Hands protection	Wear safety gloves.
Other protection	Prohibit smoking, eating in workplace. Shower and dressing after working.
SECTION 9 Physical and chemical property	
Appearance and characteristic	Brown liquid, fermentation odor.
PH value	9.0
Solubility	Soluble in water.
SECTION 10 Stability and reactivity	
Stability	Be stable under normal temperature and ordinary pressure.
Conditions and substance avoid to contact	Strong oxidizers
Harm of polymerization	No polymerize
Decomposition products	Carbon monoxide, carbon dioxide, nitrogen oxides, etc.
SECTION 11 Toxicological information	
Acute toxicity	None

Irritation	Slightly irritate to eyes and skin.
SECTION 12 Ecology information	
Ecotoxicity	None
Biodegradation	None
Non-biodegradation	None
SECTION 13 Disposal	
Litter nature	No belong to dangerous litter.
Disposal consideration	Refer to the relevant provisions of local environmental protection department before disposal. Suggested to qualified chemical waste treatment department.
SECTION 14 Transport information	
Dangerous goods number	None
UN number	None
Packaging	30kg plastic drum
Transport ways	By sea, railway, road
SECTION 15 Laws and regulation information	
No belong to dangerous goods in GB 12268-1990 《Name List of Hazardous Chemicals》	
SECTION 16 Other information	
Other information	None
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Amend information	The information contained in this Material Safety Data Sheet, as of the issue date, is believed to be true and correct. However, the accuracy or completeness of the information and any recommendations or suggestions are made without warranty or guarantee. The information only concerns the above product a supplied and may not be valid if used with other product(s) or in any process. Since the conditions of use are beyond the control of our Company, it is the responsibility of the user to determine the conditions of safe use of this preparation. The information in this sheet does not represent analytical specifications.