

ACID CELLULASE MATERIAL SAFETY DATA SHEET			
SECTION 1	Chemicals and corporate identify	SECTION 9	Physical and chemical property
SECTION 2	Risk overview	SECTION 10	Stability and reactivity
SECTION 3	Ingredient/component information	SECTION 11	Toxicological information
SECTION 4	First aid measures	SECTION 12	Ecology information
SECTION 5	Fire-fighting measures	SECTION 13	Disposal
SECTION 6	Leakage emergency measures	SECTION 14	Transport information
SECTION 7	Handling and storage	SECTION 15	Laws and regulation information
SECTION 8	Contact control/personal protection	SECTION 16	Other information
SECTION 1 Chemicals and corporate identify			
Chinese name	纤维素酶	Chinese alias	酵素水
English name	Acid Cellulase	English alias	Enzymes liquid
CAS NO.	9012-54-8	MSDS NO.	MSDS#201503
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	Concentration	CAS NO.	

Acidic Cellulase protein	20-40%	/
Sorbitol	20%	50-70-4
Sodium chloride	40%	7647-14-5
SECTION 4 First aid measures		
Skin contact	Rinse skin absolutely with soap water and clean water. If irritation, see medical advice.	
Eye contact	Did eyelid, rinse more than 15 minutes with flowing clean water. If irritation, see medical advice.	
Inhalation	Leave scene immediately to fresh air place. If breath difficultly, oxygen; if stop breath, artificial respiration.	
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、 nitrogen oxides,etc.	
Fire extinguishing method and fire extinguishing agent	Available spray water, dry powder, sand, foam and carbon dioxide fire extinguishing.	
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	4-6
Solubility	Miscible in water, emulsified in acetone and ethanol.
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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