



# Material Safety Data Sheet

Protective Clothing		HCS	DOT	
		Class: Irritating Substance		

Section I. Product Identification and Uses				
Synonyms	Not available	HMIS	H 2 F 1 R 0 PE B	
Common/Trade Name	<b>Ma-Zyme GAL</b>	TSCA	TSCA inventory: All components listed	
Chemical Name	Not applicable		TSCA 12(b) one time export: Not Listed	
Chemical formula	Not applicable		TSCA 12(b) annual export notification: Not Listed	
Chemical family	Enzyme Preparation	DSL	CEPA DSL: All components listed CEPA NDSL : Not listed	
Manufactured / Supplied	Maple Solutions 3019 Lake Road D.D.O. QC, H9B 2R3, Canada	CAS#	Mixture	
Material uses	Not available	Code		
Validation Date	Validated on 12/12/2006	Molecular Weight	Not applicable	
		Revision Number	1.0	

Section IA. First Aid Measures	
Eye contact	Immediately flush eyes with running water for at least 15 minutes, keeping eye lids open.
Skin contact	Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap.
Hazardous Inhalation	Allow the victim to rest in a well ventilated area. Give artificial respiration if not breathing. Oxygen may be administered if breathing is difficult. Get medical attention if symptoms appear.
Hazardous ingestion	Do not induce vomiting unless directed so by medical personnel. Seek medical advice if symptoms appear.

Section II. Hazardous Ingredients				
Name	CAS#	% by Weight	TLV/PEL	LC <sub>50</sub> /LD <sub>50</sub>
No hazardous ingredient				

Section III. Physical Data			
Physical state and appearance	Liquid	Odor	Typical fermented product
pH and Solution Conc.	4.6 to 5	Taste	Not available
Odor threshold	Not available	Color	Amber
Volatility	Not determined		
Melting Point	Not determined		
Boiling point	Not determined		
Specific Gravity	1.10 to 1.20		
Vapor density	Not available		
Vapor pressure	Not available		
Evaporation rate	Not available		
Viscosity	Not Tested		
Ionicity (surface active agent)	Not determined		
Critical temperature	Not available		
Instability temperature	Not available		
Condition of instability	Note available		
Dispersion properties	See solubility in Water		
Solubility	Easily soluble in cold water, hot water		
VOC's (g/L)(EPA 24/24A)	Not determined		
HAPs or TAPs	Clean air act (CAA) 112 accidental release prevention : Not listed Clean air act (CAA) 112 regulated flammable substances : Not listed Clean air act (CAA) 112 regulated toxic substances : Not listed		

Section IV. Fire and Explosion Data	
The product is	Non-flammable
Auto-ignition temperature	Not available
Fire degradation products	Not available
Flash points	Not available
Flammable limits	Not available
Fire extinguishing procedures	Use extinguishing media suitable for surrounding materials. Wear adequate personal protection to prevent contact with material or its combustion products Use All standard firefighting media
Flammability	Not applicable
Risks of explosion	Product does not have explosive properties

Section V. Reactivity Data	
Stability	Stable
Freeze/Thaw Stability	Not available
Hazardous decomp. / products	None anticipated

Degradability	Not available
Products of degradation	None anticipated
Corrosivity	None anticipated
Reactivity	None anticipated

### Section VI. Toxicological Properties

Routes of entry	Eye contact, Ingestion	
TLV	Refer to Section II. Hazardous Ingredients	
Toxicity to animals	LD50 (dermal) : No data. LD50 Oral Rat LD50 > 5,000 mg/kg (data are based on studies from similar fungal cellulase) LC50 Oral: rat LC50 > 3.9 mg/L single dose (data from similar alpha amylase)	
Chronic effects on humans	CARCINOGENIC EFFECTS MUTAGENIC EFFECTS TERATOGENIC EFFECTS DEVELOPMENTAL TOXICITY	In a 90-day feeding study with rats, no evidence of toxicity was seen at levels up to 50,000 ppm. A NOEL can be established at 50,000 ppm. Data are based on studies with fungal cellulase. Not classified as a carcinogen by IARC, OSHA, or NTP.
	Repeated or prolonged exposure is not known to aggravate any medical condition	
Acute effects on humans	No data.	
Aquatic Toxicity (LC50)	No data. Zebra fish LC50 = 330 mg/L (data are based on studies from fungal cellulase) 48 hr EC50 > 1000 mg/L (data are based on studies from fungal cellulase) <b>LC50 Algae:</b> 72-hr freshwater algae (selesnatrum capricornutum) LC50 = 1033 mg/L (data from similar fungal cellulase)	

### Section VII. Preventive Measures

Waste Information	This material, as received, is not expected to be a hazardous waste under RCRA. Waste management should be in compliance with federal, state and local regulatory requirements.
Waste Stream	Not available
Storage	Keep container tightly closed in a cool, well-ventilated place.
Precautions	Avoid contact with skin and eyes. Avoid breathing vapors or spray mists. After handling, always wash hands thoroughly with soap and water. Keep container tightly closed in a cool, well-ventilated place.
Small spill and leak	Dilute with water and mop up or absorb with an inert material and place in an appropriate waste disposal container. Finish by spreading water on contaminated area and dispose in accordance with local and state regulations.
Large spill and lea	Stop leak if without risk. Absorb with an inert material and put the spilled material in an appropriate waste disposal. Be careful that the product is not present at a concentration level above TLV.
Protective clothing in case of large spill	Splash goggles. Boots, Full suit, gloves. Consult a specialist when handling this product.

### Section VIII. Classification

DOT	Not a DOT controlled material (United States) Not applicable, RQ Not available
Maritime transportation	Not pollutant
HCS	Not controlled under HCS (United States)
Federal and State regulations	Note: California Prop. 65 require the listing of reportable chemicals that is believed to exist in this product at any detectable or suspected level no matter how minute.
	CERCLA: Hazardous substances: Not listed SARA 313 toxic chemical notification and release reporting: Not listed
International lists	Not available

### Section IX. Protective Clothing

Safety glasses, Gloves (impervious)



### Section X. Other information

References	Not available
Special Test Results	Not available
<b>CHEMTREC (24 HRS)</b>	<b>+1 (800) 424 9300</b>
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