



SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE MIXTURE AND OF THE SUPPLIER

Product name: AYF 1000™
Product code: 6546-73
Description: Yeast nutrient complex
Product use: For use in fuel ethanol fermentations
Supplier name and address Lallemand Biofuels & Distilled Spirits
 6120 West Douglas Avenue
 Milwaukee, WI 53218

Information telephone: +1 (414) 393-0410
Emergency telephone: Contact your local doctor or hospital

SECTION 2- HAZARD IDENTIFICATION

Classification of the substance or mixture

Corrosive Respiratory sensitizer Direct eye contact may cause severe irritation, redness pain blurred vision and burns possibly severe
 May cause allergy or asthma symptoms or breathing difficulties if inhaled. Inhalation of dust may cause irritation of the respiratory tract with sore throat, coughing and shortness of breath and pain in the nose throat and burns to the mucous membranes.

Environmentally Damaging Hazardous to aquatic environments

Signal Word Danger

Label element



Hazard Statements Causes serious eye damage
 Toxic to aquatic life
 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements Wear protective gloves/eye protection/face mask
 Avoid release into the environment
 Wash thoroughly after handling
 Do not eat, drink or smoke when using this product.
 If medical advice is needed have product SDS to hand

Other Hazards Contains yeast

SECTION 3– INFORMATION ON INGREDIENTS

Ingredients	CAS #	% by Wt	LD ₅₀ Oral Rat	OSHA PEL	ACGIH TLV
Fungal enzyme	9000-90-2	Proprietary	Not determined for mixture	Not established	Not established
Zinc Sulfate	7446-20-0	10.0	Not determined for mixture	Not established	Not established



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SECTION 4– FIRST AID MEASURES (If any symptoms persist, seek medical attention)

Emergency and First aid procedures

Eye contact:	Flush eyes for at least 15-20 minutes. Remove contact lenses. Seek medical attention immediately
Skin contact:	Wash affected area with soap and water. Seek medical attention or advice if irritation persists
Inhalation:	Immediately remove person to fresh air. If allergic respiratory reaction or signs of toxicity occurs seek medical attention.
Ingestion:	Remove from source of exposure. Rinse mouth thoroughly with water. Do not induce vomiting unless directed to do so by a physician. Get medical attention immediately.

Most important symptoms and effects both acute and delayed.

Irritation, nausea, shortness of breath, burning of eyes, redness eye damage

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing media:	Use appropriate medium for underlying cause of fire
Protective equipment:	Wear protective clothing and self-contained breathing apparatus (SCBA) in confined spaces
Hazardous combustion products:	Combustion products may include carbon monoxide, carbon dioxide, nitrogen oxides, biuret ammonia, sulfur oxide, zinc oxide.
Firefighting:	Do not use water directly on material. Avoid breathing vapors. Dike area to prevent runoff and contamination of water source.
Special exposure procedures:	Avoid inhalation of combustion products

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, equipment and procedures	Wear protective equipment. Avoid contact with skin and eyes and inhalation of dust. Do not handle this product if you have known allergies to zinc or enzymes.
Environmental precautions	Prevent from reaching drains, sewers or water way
Method and materials for containment and cleaning up	Avoid dust formation. Pick up product by scooping, shoveling or vacuuming and place into containers for disposal. Wash thoroughly after handling

SECTION 7– HANDLING & STORAGE

Handling:	Avoid breathing dust. Avoid contact with eyes, skin and clothing. Wear protective equipment. Wash thoroughly after handling. Do not handle if you have any known allergies to any components of this product.
Storage:	Store in a cool dry area. Do not store directly on the ground.

SECTION 8– EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters	Occupational exposure limits not determined
Engineering Controls	Emergency eye wash fountains or safety showers should be available in the immediate vicinity of use/handling. Use local exhaust
Skin Protection	Wear latex or other impervious gloves
Eye Protection	Safety glasses or goggle should be worn.
Respiratory Protection	An approved NIOSH respirator should be worn when exposures are expected to be high

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Coarse brown powder
Odor:	Odorless to mild savory odor.
Odor threshold:	Not determined
pH	Not determined
Melting point/Freezing point	Not determined
Solvent Solubility	Not determined
Solubility	Not determined



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SECTION 10– STABILITY AND REACTIVITY

Reactivity:	Stable under normal conditions of use
Incompatibility:	Strong acids, Strong bases and oxidizing agents.
Conditions to avoid:	Exposure to moist air or water. Store away from incompatible materials
Thermal decomposition temperature	Not determined
Hazardous decomposition products:	Thermal decomposition products may include toxic hazardous oxides of zinc and sulfur, iron oxide and carbon oxides (CO, CO2)

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicological information

Toxicity data:	Not determined
Local effects:	Can cause serious eye irritation. Inhalation of dust and contact with the skin can cause severe irritation.
Sensitization:	Possible allergic sensitization as product contains yeast, zinc and enzymes

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity	Do not allow this material to enter the environment
Biodegradation	Not determined
Mobility in the soil	An aqueous solution of this product containing zinc sulfate has a high mobility in soil

SECTION 13– DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with Federal, State/Provincial and local regulations.

SECTION 14 – TRANSPORT INFORMATION

NOT a DOT or TDG (Canada) controlled material
 The following transport information applies to **Zinc sulfate** only. This product is not regulated in surface transportation in bulk quantities. The information below is for shipments exceeding 1,000 lb in a single package, container, truck or railcar.
 DOT SHIPPING NAME
 Environmentally hazardous substances, solids (Zinc sulfate monohydrate) class 9, UN 3077 PGIII, RQ
 DOT Hazard Class or Division: 9
 DOT Identification Number UN 3077
 DOT Packing Group: III
 DOT Reportable Quantity: 1000 lb/454 KG
 DOT Labelling Requirement : Class 9

SECTION 15 – REGULATORY INFORMATION

TSCA (Toxic Substances Control Act) Zinc sulfate is listed
 SARA Sections 311/312 Acute Hazard
 Canadian Domestic Substances List (DSL) Zinc sulfate is listed

SECTION 16– OTHER INFORMATION

SDS Date of Preparation: March 2, 2018, Reviewed March 2020, February 2021

The information herein is based on current available data and is believed to be correct. No warranty, express or implied, is made regarding data accuracy, merchantability or hazards associated with product use. The user is responsible for determining product suitability, conditions of use and all associated hazards. Values listed in this document are not product specifications.