

SAFETY DATA SHEET

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

Product name: Bio-Ferm® XP Product code: 6411-10

Description: High performance active dry yeast Product use: Production of fuel and industrial alcohol.

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 substance or mixture.

Not a hazardous substance or mixture

GHS Label elements, including precautionary statements.

Not a hazardous substance or mixture

Hazards not otherwise classified or not covered by GHS

None

SECTION 3 – DATA ON COMPONENTS

Name	CAS#	% by Wt	LD ₅₀ & LC ₅₀	OSHA PEL	ACGIH TLV
Saccharomyces cerevisiae	68876-77-7	100%	Not established	Not established	Not established

SECTION 4 - FIRST AID MEASURES

Emergency and First aid procedures

Eye contact: Flush eyes for at least 15 minutes. If irritation persist seek medical advice

Skin contact: Wash affected area with soap and water. Remove contaminated clothing and wash before reuse Inhalation: Immediately remove person to fresh air. If allergic respiratory reaction occurs seek medical advice

Ingestion: Wash mouth and throat with water seek medical advice if symptoms persist

Most important symptoms and effects both acute and delayed Irritation, nausea, headache

Indication of any immediate medical attention and special

treatment needed.

Irritation, nausea, headache and shortness of breath

If seeking medical attention provide SDS to physician



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SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media Use water spray, foam, dry chemical or carbon dioxide

Special hazards arising from substance or mixture Combustion products may include carbon oxides or other toxic vapors.

> Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential

dust explosion hazard.

Advice for firefighters Wear self-contained breathing apparatus (SCBA) when exposed to

confined or enclosed fires.

Further information No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Avoid dust formation. For personal

protection see section 8

Environmental precautions Maintain Good Housekeeping Practices

Methods and material for containment and cleaning up Sweep up and keep in a suitable container for

disposal

For disposal see Section 13 Reference to other sections

SECTION 7 - HANDLING & STORAGE

Precautions for safe handling Avoid breathing dust. Avoid contact with eyes, skin and clothing. Wear protective

equipment described in Section 8 if exposure conditions warrant. Wash thoroughly

after handling.

Conditions for safe storage.

including any incompatibilities

Keep product in a cool dry place. Keep containers tightly sealed.

SECTION 8- EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters No applicable occupational exposure limits

Appropriate Engineering controls Emergency eye wash fountains should be available in the immediate vicinity of

use/handling. Ensure that dust-handling systems are designed in a manner to prevent the

escape of dust into the work area.

Use suitable respiratory protective device when high concentrations are present. Respiratory protection Skin protection

Wear latex or other impervious gloves.

Eye protection Safety glasses with side shields or goggles

SECTION 9- PHYSICAL & CHEMICAL PROPERTIES

Physical state:

Dried tan to beige Appearance:

Odorless to mild savory odor Odor:

Not applicable. Vapour pressure: Vapour density: Not applicable. Not applicable. Evaporation rate: Boiling point: Not applicable. Not applicable. Freezing point: Melting point: Not determined

No data available. pH: Partition coefficient: Not applicable. Viscosity: Not applicable.

Solubility in water: Suspends in water



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SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Not reactive

Chemical Stability: Stable under recommended storage conditions.

Possible hazardous reactions: Not determined

Conditions to avoid: High heat and humidity

Incompatible materials Oxidizing agents, strong acids or bases

Carbon oxides (CO, CO₂) Hazardous decomposition products:

SECTION 11- TOXICOLOGICAL INFORMATION

Acute toxicity No known effects Skin corrosion/irritation Possible irritation to skin Possible irritation to eye Eye damage/eye irritation

Respiratory or skin sensitization Possible allergic reaction or sensitization

Germ cell mutagenicity No data available Carcinogenicity No data available Reproductive toxicity No data available Specific target organ toxicity single exposure No data available Specific target organ toxicity repeated exposure No data available

SECTION 12- ECOLOGICAL INFORMATION

Toxicity No data available

Persistence and degradability No persistence and substance is bio-degradable

Bioaccumulation potential None Mobility in soil Not relevant Results of PBT and vPvB assessment Not relevant Other adverse effects None

SECTION 13 - DISPOSAL CONSIDERATIONS

Consult federal state/provincial and local regulations regarding proper disposal of waste material that may incorporate some amount of this product.

SECTION 14- TRANSPORT INFORMATION

Not a DOT, TDG (Canada) IMDG or IATA controlled material

SECTION 15 - REGULATORY INFORMATION

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings) None of the ingredients is listed SARA Section 313 (Specific toxic chemical listings) None of the ingredients is listed

Proposition 65 (California) Chemicals known to cause cancer

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL) All ingredients are listed

SECTION 16- OTHER INFORMATION

SDS Date of Preparation: January 2013, January 2015, January 2017, January 2019, January 2021

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