

SAFETY DATA SHEET

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

Product name:	Xy	loFerm [®]				
Product code:		04-15				
Description:		gh performanc				
Product use:	Fu	el ethanol proc	duction			
Supplier name and addre	ss La	Lallemand Biofuels & Distilled Spirits				
	612	20 West Doug	glas Avenue			
	Mil	waukee, WI 5	53218			
Information telephone: Emergency telephone:		(414) 393-041 ntact your loca	10 al doctor or hospital			
SECTION 2- HAZARD IDENTI	FICATION					
Classification of substa	nce or mixture					
Not a hazardous substan						
GHS Label elements, including precautionary statements. Not a hazardous substance or mixture						
Hazards not otherwise on None	classified or not cover	red by GHS				
SECTION 3 – DATA ON COM	PONENTS					
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SECTION 3 – DATA ON COM	PONENTS					
		% by Wt		OSHA PEL		
SECTION 3 – DATA ON COM	CAS #	% by Wt 20	LD ₅₀ & LC ₅₀ Not established	OSHA PEL Not established	ACGIH TLV Not established	
<u>Name</u> Saccharomyces cerevisia	CAS # ae 68876-77-7	-				
Name	CAS # ae 68876-77-7	-				
Name Saccharomyces cerevisia SECTION 4 – FIRST AID MEA	CAS # ae 68876-77-7 SURES	-				
Name Saccharomyces cerevisia SECTION 4 – FIRST AID MEAS Emergency and First aid	CAS # ae 68876-77-7 SURES d procedures	20	Not established	Not established		
Name Saccharomyces cerevisia SECTION 4 – FIRST AID MEA Emergency and First aid Eye contact:	CAS # ae 68876-77-7 SURES	20 I5 minutes. If	Not established irritation persist see	Not established k medical advice	Not established	
Name Saccharomyces cerevisia SECTION 4 – FIRST AID MEA	CAS # ae 68876-77-7 SURES d procedures Flush eyes for at least 1 Wash affected area with mmediately remove pe	20 15 minutes. If n soap and wa rson to fresh a	Not established irritation persist see ater. If irritation persis	Not established k medical advice st seek medical advi	Not established	
Name Saccharomyces cerevisia SECTION 4 – FIRST AID MEA	CAS # ae 68876-77-7 SURES d procedures Flush eyes for at least 1 Wash affected area with mmediately remove pe and seek medical attent	20 15 minutes. If n soap and wa rson to fresh a tion	Not established irritation persist see ater. If irritation persis air. If exposed to car	Not established k medical advice st seek medical advi bon dioxide give res	Not established ce piratory support if needed	
Name Saccharomyces cerevisia SECTION 4 – FIRST AID MEA	CAS # ae 68876-77-7 SURES d procedures Flush eyes for at least 1 Wash affected area with mmediately remove pe	20 15 minutes. If n soap and wa rson to fresh a tion	Not established irritation persist see ater. If irritation persis air. If exposed to car	Not established k medical advice st seek medical advi bon dioxide give res	Not established ce piratory support if needed	
Name Saccharomyces cerevisia SECTION 4 – FIRST AID MEA	CAS # 68876-77-7 SURES d procedures Flush eyes for at least 1 Wash affected area with mmediately remove pe and seek medical atten Move from source of ex	20 15 minutes. If n soap and wa rson to fresh a tion posure. If sign	Not established irritation persist see ater. If irritation persis air. If exposed to car ns of toxicity occur se	Not established k medical advice st seek medical advi bon dioxide give res eek medical attention tory distress, dizzine	Not established ce piratory support if needed	



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SECTION 5 – FIRE FIGHTING MEASURES

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Extinguishing media Suitable extinguishing media		Use appropriate medium for underlying cause of fire		
Special hazards arising from substance or mixture		None		
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 Environmental precautions		Use appropriate personal protective equipment as outlined in Section 8 Do not allow product to enter the environment		
Methods and material for containment and cleaning up		In the event of a spill, clean area with disposable absorbent pads or sheets. Spilled or discarded yeast at an ethanol production facility should be disposed of by flushing into the beer-well where it can be thermally inactivated. Residual yeast can be inactivated by cleaning with a solution of 2 vol% household bleach (1:50 dilution) in water or a 1-2 % caustic solution.		
Reference to other sections		For disposal see Section 13		
SECTION 7 – HANDLING & STORAGE				
SECTION / - HANDLING & STOKAGE				
Precautions for safe handling	Section 8. Wash	closed when not in use. Wear protective equipment described in thoroughly after handling. Do not handle this material if you have r otherwise physical reaction to yeast.		
Conditions for safe storage, including any incompatibilities	in use. Respiring	ation temperature of 33.8-40°F or 1-4°C. Keep containers closed when not yeast may naturally generate carbon dioxide. Ensure adequate ventilation where packaged yeast is stored. Over exposure to carbon dioxide may on.		
SECTION 8- EXPOSURE CONTROLS /	PERSONAL PROTE	CTION		
Control Parameters Appropriate Engineering controls Respiratory protection Skin protection Eye protection	No applicable occupational exposure limits Emergency eye wash fountains should be available in the immediate vicinity of use/handling. Not required under normal conditions of use Wear latex or other impermeable gloves. Safety glasses with side shields or goggles			
SECTION 9- PHYSICAL & CHEMICAL F	PROPERTIES			
Physical state:	Liquid			

Physical state:
Appearance:
Odor:
Freezing point:
Melting point:
pH:
Partition coefficient:
Viscosity:
Solubility in water:
-

Liquid Tan Mild savory odor Not determined Not determined No data available. Not applicable. Not applicable. Suspends in water



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SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possible hazardous reactions: Conditions to avoid: Incompatible materials Hazardous decomposition products: None known Stable under recommended storage conditions. None High temperatures None None

SECTION 11- TOXICOLOGICAL INFORMATION

Acute toxicity Skin corrosion/irritation Serious eye damage/eye irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity single exposure Specific target organ toxicity repeated exposure No data available No data available No data available Possible allergic sensitization No data available No data available No data available No data available No data available

SECTION 12- ECOLOGICAL INFORMATION

Toxicity Persistence and degradability Bioaccumulation potential Mobility in soil Other adverse effects No data available No data available No data available No data available No data available

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with Federal, State and Local regulations. Yeast in liquid and solid wastes must be inactivated; this can be accomplished by thermal treatment at $176^{\circ}F(80^{\circ}C)$ for 2 minutes. Spilled or discarded yeast at an ethanol production facility should be disposed of by flushing into the beer-well where it can be thermally inactivated. Residual yeast can be inactivated by cleaning with a solution of 2 vol % household bleach (1:50 dilution) in water or a 1-2 % caustic solution.

SECTION 14– TRANSPORT INFORMATION

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

SECTION 15 – REGULATORY INFORMATION

This product does not meet the definition of a hazardous material given in the US Occupational Safety and Health Administration's Hazard Communication Standard.

SECTION 16– OTHER INFORMATION

SDS Date of Preparation: January 2019, Reviewed January 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.