XYLOGENICS
REDEFINING FERMENTATION

Safety Data Sheet

SECTION 1- PRODUCT & COMPANY IDENTIFICATION

Product name:	FX23
Product code:	FX23SLY
Description:	Stabilized liquid yeast
Product use:	Fuel ethanol production
Supplier name and address	Xylogenics, Inc. 606 W. Main St. Ste. A Pittsboro, IN 46167
Information telephone:	317-625-3623
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 GH	None

SECTION 3- DATA ON COMPONENTS

Name	CAS #	% by Weight	LD_{50} and LC_{50}	OSHA PEL	ACGIH TLV
Saccharomyces cerevisiae	68876-77-7	20-24	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. If irritation persist seek medical advice
Inhalation:	Immediately remove person to fresh air. If exposed to carbon dioxide give respiratory support if needed and seek medical attention
Ingestion:	Move from source of exposure. If signs of toxicity occur seek medical attention

Most important symptoms and effects both acute and delayed	Respiratory distress, dizziness or stupor if exposed to carbon dioxide
Indication of any immediate medical attention and special SDS to **treatment needed.**	If seeking medical attention provide physician

SECTION 5- FIRE FIGHTING MEASURES

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 fires
Further information	No data available

SECTION 6- ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment And emergency procedures	Use appropriate personal protective equipment as outlined in Section 8
Environmental precautions	Do not let product enter 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

Precautions for safe handling	Keep containers closed when not in use. Wear protective equipment described in Section 8. Wash thoroughly after handling. Do not handle this material if you have known allergies or otherwise physical reaction to yeast.
Conditions for safe storage, including incompatibilities	Store at a refrigeration temperature of 32-36°F or 0-2°C. any Keep containers closed when not in use. Respiring yeast may naturally generate carbon dioxide. Ensure adequate ventilation in storage areas where packaged yeast is stored. Over exposure to carbon dioxide may cause asphyxiation.

SECTION 8- EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters	No applicable occupational exposure limits
Appropriate Engineering controls	Emergency eye wash fountains should be available in in the immediate vicinity of use/handling
Respiratory protection	Not required under normal conditions of use
Skin protection	Wear latex or other impermeable gloves
Eye protection	Safety glasses with side shields or goggles

SECTION 9- PHYSICAL & CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance:	Cream or tan
Odor:	Characteristic odor associated with yeast
Freezing Point:	Not determined
Melting point:	Not determined
Viscosity:	Not applicable
Solubility in water:	Suspends in water

SECTION 10- STABILITY AND REACTIVITY

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

SECTION 11- TOXICOLOGICAL INFORMATION

Acute toxicity	No data available
Skin corrosion/irritation	Possible irritation to skin
Eye damage/eye irritation	Possible irritation to eyes
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 data available
Bioaccumulation potential	No data available
Mobility in soil	No data available
Other adverse effects	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°F (80°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- TRNASPORT INFORMATION

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

SECTION 15- REGULATORY INFORMATION

Product is classified as NIH (National Institute of Health, US) Risk Group I. This product does not meet the definition of a Hazardous material given in the U.S. Occupational Safety and Health Administration's Hazard Communication Standard.

SECTION 16- OTHER INFORMATION

SDS Date of Preparation: November 2022.

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