

Product: 655-421 Prentox® Synpren-Fish™ Toxicant

**Material Safety Data Sheet
U.S. Department of Labor (OSHA 29 CFR 1910.1200)**

Manufacturer's Name: Prentiss Incorporated
C. B. 2000
Floral Park, NY 11001
Telephone Number: (516) 326-1919

Section 1: Chemical Identification

Product: 655-421 Prentox® Synpren-Fish™ Toxicant
EPA Signal Word: DANGER

Active Ingredients (%): Rotenone (2.5%) (CAS # 83-79-4)
Other Cube Resins (5%) N/A
Piperonyl Butoxide Technical (2.5%) (CAS # 51-03-6)

Chemical Names: Rotenone - N/A
Piperonyl Butoxide Technical - (Butylcarbityl) (6-Propylpiperonyl) ether

Chemical Class: Mixture, a.i.'s, rotenone and piperonyl butoxide technical

Section 2: Composition/ Information On Ingredients

Material:	OSHA	ACGIH	NTP/IARC/OSHA	
	PEL	TLV	Other	Carcinogen
Rotenone	(TWA) 5 mg/ M ³	(STEL) 10 mg/M ³ (TWA) 5 mg/M ³		No/No/No
Other associated cube resins	Not Est.	Not Est.		
Piperonyl Butoxide Technical	Not Est.	Not Est.		No/No/No
Xylene Range Aromatic Solvent Supplier recommendation 100 ppm (CAS # 64742-95-6) (Not to exceed 90%)				
Contains the following ingredients, by weight (typical):				
1,2,4-Trimethyl Benzene (CAS # 95-63-6)	32.0		(TWA) 25 ppm	
Mixed Xylenes (CAS # 1330-20-7)	3.0		(TWA) 100 ppm	
Cumene (CAS # 98-82-8)	1.5		(TWA) 50 ppm	
Ethyl Benzene (CAS # 100-41-4)	0.5		(TWA) 100 ppm	
Emulsifier #1 (CAS # N/A)	N/D		N/D	
Emulsifier #2 (CAS # N/A)	N/D		N/D	

Section 3: Hazards Identification

Clear liquid with mild odor. Fatal if inhaled. May be fatal if swallowed. Harmful if absorbed through skin. Causes substantial but temporary eye injury. Causes skin irritation. This pesticide is extremely toxic to fish.

Potential Health Effects:

Primary Routes of Entry: Inhalation, ingestion, skin and eye contact.

Health Hazards (Acute and Chronic): Causes mucous membrane irritation. Chronic exposure can cause damage to liver and/or kidneys. May be fatal if swallowed. May cause eye injury. Causes skin irritation. Do not get in eyes, on skin or on clothing. Toxicity of other components: This product contains a Xylene Range Aromatic Solvent composed of xylenes, ethylbenzenes and aromatic naphtha containing trimethylbenzenes. Inhalation of solvent vapors at high concentrations can cause central nervous system depression, respiratory tract irritation, asphyxiation, cardiac stress, and coma. Exposure to extremely high levels of xylenes may cause kidney or liver damage.

Signs and Symptoms of Overexposure: Can cause skin irritation. Ingestion or inhalation can cause numbness, nausea, vomiting and tremors.

Medical Conditions Generally Aggravated by Exposure: None known.

Section 4: First Aid Measures

If swallowed, call a physician or Poison Control Center. Do not induce vomiting. This product contains aromatic petroleum solvent. Aspiration may be a hazard. Promptly drink a large quantity of milk, egg white, and gelatin solution, or if these are not available, water. Avoid alcohol.

If inhaled, remove victim to fresh air. If not breathing, administer artificial respiration, preferably by mouth to mouth. Get medical attention.

If on skin, wash with plenty of soap and water. Get medical attention if irritation persists.

If in eyes, flush eyes with plenty of water. Get medical attention if irritation persists.

Section 5: Fire Fighting Measures

Fire and Explosion

Flash Point (Method Used): 105° F. Closed cup.

Flammable Limits: LEL: 1.9 UEL: 12.6 (Solvent - approximate)

NFPA Hazard Ratings: Health: 2 Flammability: 2 Reactivity: 0

Extinguishing Media: CO₂, foam, dry chemical, or water spray.

Special Fire Fighting Procedures: Do not inhale smoke. Use self-contained breathing apparatus and protective clothing. This product is extremely toxic to fish, and is toxic to birds and other wildlife, prevent spread of contaminated runoff.

Unusual Fire and Explosion Hazards: When heated to decomposition, product emits acrid smoke and fumes.

Flammability Classification/Rating:

NFPA/OSHA Class: II

NFPA Rating (Fire): 2

Section 6: Accidental Release Measures

Wear protective equipment, as required, to prevent contact with product or its vapors. Cover the spilled material with generous amounts of absorbent material, such as clay, diatomaceous earth, sand or sawdust. Sweep the contaminated absorbent onto a shovel and put the sweepings into a salvage drum. Dispose of wastes as below. Place any leaking container into a similar drum or glass container. Mark the drum or container with name of product, ingredient statement, precautionary statements and signal word. Contact us for replacement label. This product is extremely toxic to fish. Fish kills are expected at recommended rates. Keep it out of lakes, streams or ponds except under use conditions.

Section 7: Handling and Storage

Do not contaminate water, food or feed by storage or disposal. Store in a dry place away from temperature extremes. Avoid inhalation of vapors. Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin. Wear clean protective clothing.

Other precautions: Periodically inspect stored materials.

Section 8: Exposure Controls/Personal Protection

Respiratory protection: Mixers and handlers: Do not inhale. Use NIOSH certified respirator for organic vapor protection.

Ventilation:

Local Exhaust: As required to meet TLV.

Special: Not applicable.

Mechanical: As required to meet TLV.

Other: Not applicable.

Protective Gloves: Chemical resistant.

Eye Protection: Safety glasses, face shield or goggles.

Other protective clothing or equipment: Wear long pants, long sleeved shirt or other body covering clothes. Avoid skin or eye contact.

Work/Hygienic practices: Wash thoroughly after handling and before eating or smoking. Remove contaminated clothing and wash thoroughly before reuse.

Section 9: Physical and Chemical Properties

Appearance:	Amber Liquid
Odor:	Aromatic Solvent Odor
Boiling Point:	N/D
Specific Gravity (H₂O = 1):	0.8964
Vapor Pressure (mmHg):	N/D
Melting Point:	N/D
Vapor Density (Air = 1):	N/D
Evaporation Rate (Butyl Acetate = 1):	N/D
Solubility in Water:	Emulsifies.

Section 10: Stability and Reactivity

Stability:	Stable.
Conditions to avoid for stability:	None.
Incompatibility:	Strong acids and oxidizers.
Hazardous Decomposition or Byproducts:	CO, CO ₂
Hazardous Polymerization:	Will not occur.
Conditions to avoid for Hazardous Polymerization:	None.

Section 11: Toxicological Information

Acute Toxicity/Irritation Studies:

(The following data were developed with Synpren-Fish)

Ingestion:	Oral LD ₅₀	147 mg/Kg (Rat – female) (Moderately toxic) 704 mg/Kg (Rat – male) (Slightly toxic) 561 mg/Kg (Rat – overall) (Slightly toxic)
Dermal:		>2020 mg/Kg (Rabbit) (Slightly toxic)
Inhalation:		4-hour LC ₅₀ 0.041 mg/l. (Female Rat) (Highly toxic) 4-hour LC ₅₀ 0.059 mg/l. (Male Rat) (Highly toxic) 4-hour LC ₅₀ 0.049 mg/l. (Rat – overall) (Highly toxic)
Eye Contact:		Moderately irritating (Rabbit)
Skin Contact:		Moderately irritating (Rabbit)

Skin Sensitization: Non-sensitizing (Guinea Pig)
(The following data were developed with rotenone technical and piperonyl butoxide technical)

Mutagenic Potential: Neither ingredient was mutagenic when tested.

Reproductive Hazard Potential: Neither ingredient had reproductive effects when tested

Chronic/Subchronic Toxicity Studies:

Cancer Information: A statistically significant increase in the number of benign liver tumors appeared in mice fed piperonyl butoxide technical at doses which far exceed any anticipated daily human intake. Independent industry toxicology experts who have reviewed the data agree that the findings of the study do not indicate a health risk to human beings. Rotenone was not carcinogenic when tested in rats and mice.

Toxicity of Other Components:

Petroleum solvent: The supplier reports that inhalation of high vapor concentrations (over 1,000 ppm) may cause nervous system effects such as headaches, dizziness, anesthesia and respiratory tract irritation

Surfactant: Causes severe eye irritation, which could lead to permanent eye damage. Prolonged or repeated skin contact may cause discomfort and local redness. Mist can irritate the respiratory tract, experienced as nasal discomfort and discharge with chest pain and coughing.

Target Organs: Eyes, skin, respiratory tract.

Section 12: Ecological Information

Summary of Effects: This product is extremely toxic to fish. Fish kills are expected at recommended rates. Consult your State Fish and Game Agency before applying this product to public waters to determine if a permit is needed for such an application. Do not contaminate untreated water when disposing of equipment washwaters.

Section 13: Disposal Considerations

Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Section 14: Transport Information

DOT Classification: Pesticides, liquid, toxic, flammable, n.o.s. (Rotenone, petroleum naphtha)

Hazard Class: 6.1,PG I

Subsidiary hazard class: 3

DOT Identification Number: UN2903

DOT Shipping Label: Poison and/or Toxic

Note: for transport purposes (49 CFR Part 173.132), the calculated 1-hour LC50 (Rat, overall) is: 0.196 mg/L

Section 15: Regulatory Information

SARA Title III Classification:

Section 311/312:

Acute health hazard

Fire hazard

Section 313 Chemicals:

Piperonyl Butoxide Technical (2.5%) (CAS # 51-03-6)

Xylene Range Aromatic Solvent (% Conf.) (CAS # 64742-95-6)

(Not to exceed 90%)

Contains the following SARA listed ingredients, by weight (typical):

1,2,4-Trimethyl Benzene (CAS # 95-63-6)	32.0	(TWA) 25 ppm
Mixed Xylenes (CAS # 1330-20-7)	3.0	(TWA) 100 ppm
Cumene (CAS # 98-82-8)	1.5	(TWA) 50 ppm
Ethyl Benzene (CAS # 100-41-4)	0.5	(TWA) 100 ppm

This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III and of 40 CFR 372. Any copies or redistribution of this MSDS must include this notice.

Proposition 65: This product does not contain any chemical which is known to the State of California to cause cancer or birth defects or other reproductive harm.

CERCLA Reportable Quantity (RQ): None.

RCRA Classification: Ignitable.

TSCA Status: Registered pesticide, exempt from TSCA regulation. All ingredients are on the TSCA inventory.

Other: Rotenone

Illinois toxic substance

Massachusetts Hazardous Substance

New Jersey Special Health Hazardous Substance

Pennsylvania Workplace Hazardous Substance

Section 16: Other Information

NFPA Hazard Ratings:	Health:	3	0	Least	
	Flammability:	2		1	Slight
	Reactivity:		0	2	Moderate
				3	High
				4	Severe

Date Prepared: September 18, 2000

Supersedes: August 10, 2000

Reason: Revised section 15.

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.