

Safety Data Sheet Date of issue: 10/06/2016

Revision date: 03/08/2018

Version: 1.0

SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Trade name	: Prenfish Fish Toxicant
Synonyms	: 100526526, 100526527, 100526529, 100526560, 100534458, EPA Reg. No.: 89459-85, RF2232 LIQUID FT
1.2. Recommended use and restriction	
Recommended use	: Piscicides.
Restrictions on use	: Keep out of reach of children. Avoid inhalation of vapors or fumes. Use in well ventillated area. Avoid all contact with skin, eyes, or clothing.
1.3. Supplier	
Central Garden & Pet Company	
1501 E. Woodfield Road, Suite 200W	
Schaumburg, IL 60173 - United States	
www.zoecon.com	
1.4. Emergency telephone number	
Emergency number	: 1-800-248-7763
	1-800-424-9300 - CHEMTREC
	1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted
SECTION 2: Hazard(s) identification	on
2.1. Classification of the substance o	or mixture
GHS-US classification	
Acute toxicity (oral) Category 3	Toxic if swallowed
Acute toxicity (inhalation) Category 2	Fatal if inhaled
Serious eye damage/eye irritation Category 2 Carcinogenicity Category 2	2B Causes eye irritation Suspected of causing cancer
Specific target organ toxicity (single exposure	
Specific target organ toxicity (single exposure	
Aspiration hazard Category 1	May be fatal if swallowed and enters airways
2.2. GHS Label elements, including p	recautionary statements
GHS-US labeling	
Hazard pictograms (GHS-US)	
- <u>-</u> · · · /	
	GHS06 GHS07 GHS08
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: Toxic if swallowed
	May be fatal if swallowed and enters airways
	Causes eye irritation Fatal if inhaled
	May cause respiratory irritation
	May cause drowsiness or dizziness
	Suspected of causing cancer
Precautionary statements (GHS-US)	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
	Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray.
	Wash hands, forearms and face thoroughly after handling.
	Do not eat, drink or smoke when using this product.
	Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
	If swallowed: Immediately call a poison center or doctor
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	If in eyes: Rinse cautiously with and easy to do. Continue rinsing If exposed or concerned: Get m Immediately call a poison cente Rinse mouth. Do NOT induce vomiting. If eye irritation persists: Get me Store in a well-ventilated place. In case of inadequate ventilation Store locked up.	edical advice/attention. er or doctor dical advice/attention. Keep container tightly closed.	
2.3. Other hazards which do not resu	ult in classification		
Other hazards not contributing to the classification		to fish and other aquatic organisms. Under Ur 0 - Hazard Communication Standard), this pro	
2.4. Unknown acute toxicity (GHS US	S)		
Not applicable			
SECTION 3: Composition/Informa	ation on ingredients		
3.1. Substances			
Not applicable			
3.2. Mixtures			
Name		Product identifier	%
Rotenone		(CAS-No.) 83-79-4	5
Cube Resins other than rotenone		(CAS-No.) N/A	5 20
Benzyl alcohol Bropylong Chaol		(CAS-No.) 100-51-6	10
Propylene Glycol Solvent naphtha		(CAS-No.) 57-55-6 (CAS-No.) 64742-94-5	52.79
Naphthalene		(CAS-No.) 04742-94-5 (CAS-No.) 91-20-3	0.53
Other ingredients		(CAS-No.) N/A	Balance
SECTION 4: First-aid measures			
4.1. Description of first aid measures	S		
First-aid measures general	: Call a physician immediately.		
First-aid measures after inhalation	: IF INHALED: Remove person to	o fresh air and keep comfortable for breathing a POISON CENTER or doctor/physician if yo	
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of advice/attention.	of soap and water. If skin irritation or rash occ	urs: Get medical
First-aid measures after eye contact		ith water for several minutes. Remove contac g. If eye irritation persists: Get medical advice	
First-aid measures after ingestion		ON CENTER or doctor/physician if you feel un o not induce vomiting. Do NOT induce vomitir	
4.2. Most important symptoms and e	effects (acute and delayed)		
Symptoms/effects	: May cause drowsiness or dizzir	ness.	
Symptoms/effects after inhalation	: Fatal if inhaled. Causes dizzine respiratory irritation if inhaled at	ss or drowsiness if inhaled at non-lethal doses non-lethal doses.	s. Causes
Symptoms/effects after eye contact	: Mild eye irritation.		
Symptoms/effects after ingestion	: Toxic if swallowed. Risk of lung	edema.	
Chronic symptoms	: May cause cancer.		
4.3. Immediate medical attention and	d special treatment, if necessarv		
Contains petroleum distillate vomiting may ca		tomatically.	
SECTION 5: Fire-fighting measure	es		
SECTION 5: Fire-fighting measure 5.1. Suitable (and unsuitable) exting			

Insuitable extinguishing media	: Avoid heavy hose streams.
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.

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5.2. Specific hazards arising from th	e chemical
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
5.3. Special protective equipment an	nd precautions for fire-fighters
Firefighting instructions	Do not allow fire fighting water to escape into waterways or sewers. LARGE FIRES: Move containers from fire area if you can do it without risk. Ventilate closed spaces before entering. Do not breathe gas/fumes/vapor/spray. Keep unauthorized personnel away.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release m	neasures
6.1. Personal precautions, protective	e equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Do not breathe dust/fume/gas/mist/vapors/spray. Only qualified personnel equipped with suitable protective equipment may intervene.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: Exposure controls/personal protection.
Emergency procedures	: As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Do NOT wash away into sewer. Avoid release to the environment. Evacuate unnecessary personnel. Stay upwind. Stop leak if safe to do so. Wear appropriate personal protective equipment, avoid direct contact.
6.2. Environmental precautions	
Avoid release to the environment. Do not allo	ow runoff into water, storm drains or drainage ditches.
6.3. Methods and material for contain	nment and cleaning up
Methods for cleaning up	Absorb spills with an inert material, clay granules or other inert absorbent material and put in container for disposal. Do not flush to sewer or allow to enter waterways. Wear appropriate personal protective equipment, avoid direct contact. Notify authorities if product enters sewers or public waters.
SECTION 7: Handling and storage	e
7.1. Precautions for safe handling	
Precautions for safe handling	Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
	: Do not eat, drink or smoke when using this product. Always wash hands after handling the
Hygiene measures	product.
Hygiene measures 7.2. Conditions for safe storage, incl Storage conditions	

8.1. Control parameters

Rotenone (83-79-4)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (commercial)
ACGIH	Remark (ACGIH)	URT & eye irr; CNS impair
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m³
IDLH	US IDLH (mg/m³)	2500 mg/m³
NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m³
Benzyl alcohol (100-51-6)		
AIHA	WEEL TWA (ppm)	10 ppm
Propylene Glycol (57-55-6)		
AIHA	WEEL TWA (mg/m ³)	10 mg/m ³

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Naphthalene (91-20-3)		
ACGIH	ACGIH TWA (ppm)	10 ppm
ACGIH	Remark (ACGIH)	Hematologic eff; URT & eye irr; Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure)
OSHA	OSHA PEL (TWA) (mg/m³)	50 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	10 ppm
IDLH	US IDLH (ppm)	250 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	50 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
NIOSH	NIOSH REL (STEL) (mg/m ³)	75 mg/m³
NIOSH	NIOSH REL (STEL) (ppm)	15 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls

: Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Environmental exposure controls

: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear chemical resistant gloves made out of barrier laminate, nitrile rubber < or equal to 14 mils, neoprene rubber < or equal to 14 mils or Viton < or equal to 14 mils

Eye protection:

Wear chemical splash safety goggles. Safety glasses

Skin and body protection:

Coveralls, over long-sleeved shirt and long pants

Respiratory protection:

Mixers loaders, applicators and other handlers (except pilots): wear a NIOSH approved particulate respirator with any N, R or P filter with NIOSH approval prefix TC-84A or NIOSH approved powered air purifying respirator with HE filter with NIOSH approval prefix TC-21C. Wear respiratory protection. In case of insufficient ventilation, use NIOSH approved respiratory protection.



SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and	chemical properties		
Physical state	: Liquid		
Appearance	: Clear amber liquid		
Color	: Amber		
Odor	: Strong, unpleasant, petroleum gas-like		
Odor threshold	: No data available		
рН	: 6.87 @ 23.4°C		
Melting point	: Not applicable		

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Freezing point	: No data available
Boiling point	: No data available
Flash point	: 112°C (233.6°F)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.0336 g/ml @ 20°C
Solubility	: Insoluble
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: <20 cPs @ 25°C
Explosion limits	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat, sparks, open flame. Excess heat. Protect from sunlight. Do not freeze.

10.5. Incompatible materials

Strong acids. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Prenfish Fish Toxicant		
рН	6.87 @ 23.4°C	
Rotenone (83-79-4)		
LD50 oral rat	39.5 mg/kg female, LD50 102 mg/kg male	
LD50 dermal rabbit	> 5000 mg/kg	
LC50 inhalation rat (mg/l)	0.0212 mg/l/4h	
Benzyl alcohol (100-51-6)		
LD50 oral rat	1620 mg/kg	
LD50 dermal	> 2000 mg/kg	
LC50 inhalation rat (mg/l)	> 4.2 mg/l/4h	
Solvent naphtha (64742-94-5)		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 inhalation rat (mg/l)	> 4.778 mg/l/4h	
Naphthalene (91-20-3)		
LD50 oral rat	490 - 2600 mg/kg	
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Naphthalene (91-20-3)	
LD50 dermal	> 2000 mg/kg
IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity, Reasonably anticipated to be Human Carcinogen
In OSHA Hazard Communication Carcinogen list?	Yes

GHS-US Properties	Classification
Acute toxicity	Oral: Toxic if swallowed. Inhalation: Fatal if inhaled.
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes eye irritation.
Respiratory or skin sensitization	Not classified
Germ cells mutagen	Not classified
Carcinogenicity	Suspected of causing cancer.
Reproductive toxicity	Not classified
Specific target organ toxicant (single exposure)	May cause drowsiness or dizziness. May cause respiratory irritation.
Specific target organ toxicant (repeated exposure)	Not classified
Aspiration hazard	May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Rotenone (83-79-4)		
LC50 Acute fish 1	0.00194 mg/l (Exposure time: 96h - Rainbow trout)	
EC50 Daphnia 1	0.0037 mg/l (Exposure time: 96h - Daphnia magna)	
NOEC Chronic fish 1	0.00101 mg/l (Rainbow trout)	
NOEC Chronic crustacea 1	0.00125 mg/l (Daphnia magna)	
Benzyl alcohol (100-51-6)		
LC50 Acute fish 1	460 mg/l (Exposure time: 96h - Fathead minnow)	
LC50 Acute fish 2	> 100 mg/l (Exposure time: 96h - Japanese kilifish)	
LC50 Acute crustacea 1	230 mg/l (Exposure time: 48h - Daphnia magna)	

12.2. Persistence and degradability

Rotenone (83-79-4)		
Persistence and degradability	Rotenone is not persistent in the environment and its low vapor pressure (6.9x10-10 torr) and Henry's Law constant (1.1x10-13 atm-m3 mol-1) limit its volatility. If released to water, rotenone generally degrades quickly through abiotic (hydrolytic and photolytic) mechanisms.	

12.3. Bioaccumulative potential

Rotenone (83-79-4)		
Log Pow	4.1	
Bioaccumulative potential	Rotenone has a relatively low potential for bioconcentrating in aquatic organisms.	

Image: Nobility in soil Rotenone (83-79-4) Mobility in soil Rotenone is mobile to moderately mobile in soil and sediment with a half-life of a few days to several weeks or longer depending on water temperature

12.5.	Other adverse effects	
Prenfish Fish Toxicant		
Ecologi	ical Fate	This product is extremely toxic to fish and other aquatic organisms.

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SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations

: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

SECTION 14: Transport information					
	UN number	Proper Shipping Name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN2902	Pesticides, liquid, toxic, n.o.s. (Rotenone)	6.1	II	RQ: Naphthalene 100 lbs. Marine pollutant
IMDG	UN2902	Pesticides, liquid, toxic, n.o.s. (Rotenone)	6.1	II	Marine pollutant
IATA	UN2902	Pesticides, liquid, toxic, n.o.s. (Rotenone)	6.1	II	Acute aquatic toxicity

Other Information

: The calculated 1-hour acute toxicity for inhalation LC50 = 1.588 mg/L

SECTION 15: Regulatory information				
15.1. US Federal regulations				
Benzyl alcohol (100-51-6)	Benzyl alcohol (100-51-6)			
Listed on the United States TSCA (Toxic Substa	ances Control Act) inventory			
Propylene Glycol (57-55-6)				
Listed on the United States TSCA (Toxic Substa	ances Control Act) inventory			
Solvent naphtha (64742-94-5)				
Listed on the United States TSCA (Toxic Substa	ances Control Act) inventory			
Naphthalene (91-20-3)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313				
CERCLA RQ	100 lb			
SARA Section 313 - Emission Reporting	0.1 %			
FIFRA Labelling				
EPA Registration Number	89459-85			
This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.				
FIFRA Pictogram				
FIFRA Signal word	Danger			
FIFRA Precautionary Statement	KEEP OUT OF REACH OF CHILDREN.			
FIFRA Hazards to Humans and Domestic Animals	Fatal if swallowed or inhaled. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation. Do not breath spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.			
FIFRA First Aid	Call a poison control center or doctor immediately for further treatment advice. IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. NOTE TO PHYSICIAN: Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Symptoms of exposure include numbness, lethargy and incoordination. Decontamination, symptomatic and supportive treatment is recommended.			

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FIFRA Environmental Hazards	This product is extremely toxic to fish and other aquatic organisms. Fish kills are expected at recommended rates. Consult your State Fish and Game Agency and other agencies before applying this product to public waters to determine if a permit is needed for such an application. Do not contaminate water outside of the treatment area by cleaning of equipment or disposal of equipment wash waters. Do not contaminate water outside of the treatment area, food or feed bystorage or disposal. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority (PTOW).
FIFRA Physical Hazard	Combustible, Do not use or store near heat or open flame, Do not allow product to come into contact with oxidizing agents and/or strong acids

15.2. US State regulations

No additional information available

SECTION 16: Other information			
Date of issue	: 06 October 2016		
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SDS US (GHS HazCom 2012) - CGP

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