

Safety Data Sheet Tarpedo®

1. Identification

PRODUCT IDENTIFIER

Product Identity Tarpedo

RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Intended use See Technical Data Sheet.

Application Method See Technical Data Sheet.

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company Name BioChem Systems, Inc.
P.O Box 8098
The Woodlands, TX 77387-8098

24 hour Emergency Telephone No. PERS: (800) 633-8253

Customer Service: (Business) 800-777-7870

2. Hazard(s) Identification

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Combustible Liquid;H227	Combustible Liquid.
Acute Tox. 5;H303	May be harmful if swallowed. (Not adopted by US OSHA)
Acute Tox. 3;H331	Toxic if inhaled.
Skin Irrit. 3;H316	Causes mild skin irritation. (Not adopted by US OSHA)
Eye Dam. 1;H318	Causes serious eye damage.
Carc. 2;H351	Suspected of causing cancer.
Asp. Tox. 1;H304	May be fatal if swallowed and enters airways.
Aquatic Chronic 2;H411	Toxic to aquatic life with long lasting effects.

LABEL ELEMENTS

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

H227 Combustible liquid.

H303 May be harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H316 Causes mild skin irritation.

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

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H318 Causes serious eye damage.
 H331 Toxic if inhaled.
 H351 Suspected of causing cancer.
 H411 Toxic to aquatic life with long lasting effects.

[Prevention]:

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.
 P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
 P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.
 P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
 P308+313 IF exposed or concerned: Get medical advice / attention.
 P311 Call a POISON CENTER or doctor / physician.
 P321 Specific treatment (see information on this label).
 P331 Do NOT induce vomiting.
 P332+313 If skin irritation occurs: Get medical advice / attention.
 P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P391 Collect spillage.

[Storage]:

P403+235 Store in a well ventilated place. Keep cool.
 P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/Information on Ingredients

MIXTURE

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Solvent naphtha (petroleum), heavy aromatic CAS Number: Proprietary	75 - 100	Asp. Tox. 1;H304 Aquatic Acute 2;H401 Aquatic Chronic 2;H411	[1]
Naphthalene CAS Number: Proprietary	1.0 - 10	Carc. 2;H351 Acute Tox. 4;H302	[1][2]

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		Aquatic Acute 1;H400 Aquatic Chronic 1;H410	
Additive Package CAS Number: Proprietary	1.0 - 10	Eye Dam. 1;H318 Acute Tox. 4;H302 Skin Irrit. 2;H315	[1]
Dipropylene glycol n-butyl ether CAS Number: Proprietary	1.0 - 10	Not Classified	[1]
1-Butoxy-2-propanol CAS Number: Proprietary	1.0 - 10	Eye Irrit. 2;H319 Skin Irrit. 2;H315	[1]
1,2,4-trimethylbenzene CAS Number: Proprietary	1.0 - 10	Flam. Liq. 3;H226 Acute Tox. 4;H332 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Aquatic Chronic 2;H411	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First Aid Measures

DESCRIPTION OF FIRST AID MEASURES

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Overview	<p>Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.</p> <p>Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.</p>
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Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

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Inhalation	Toxic if inhaled. May be fatal if swallowed and enters airways.
Eyes	Causes serious eye damage.
Skin	Causes mild skin irritation.
Ingestion	May be harmful if swallowed.

5. Fire-Fighting Measures

FLAMMABILITY

Flammability Flash Point: 145F (TCC)

EXTINGUISHING MEDIA

Dry chemical or foam.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Hazardous decomposition: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Avoid breathing dust / fume / gas / mist / vapors / spray.

ADVICE FOR FIRE-FIGHTERS

Use self-contained breathing apparatus and full protective clothing (Bunker gear).

ERG Guide No. ----

6. Accidental Release Measures

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Put on appropriate personal protective equipment (see section 8).

ENVIRONMENTAL PRECAUTIONS

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

Avoid use of any ignition source near spill.

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7. Handling and Storage

PRECAUTIONS FOR SAFE HANDLING

Store in accordance with the National Fire Protection Association's publication NFPA 30, Flammable and Combustible Liquids Code. 29 CFR 1910.106 applies to the handling, storage, and use of flammable and combustible liquids.

See section 2 for further details. - [Prevention]:

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Handle containers carefully to prevent damage and spillage.

Store in a cool dry area, away from heat, sparks and open flame. Keep containers sealed when not in use. Store out of direct sunlight.

Incompatible materials: Strong oxidizing agents and acids.

Store in original container in well ventilated areas at temperatures below 140F. Store in closed containers away from heat or sources of ignition and oxidizing materials. Protect against physical damage to containers.

See section 2 for further details. - [Storage]:

8. Exposure Controls and Personal Protection

CONTROL PARAMETERS

Exposure

CAS No.	Ingredient	Source	Value
Proprietary	Naphthalene	OSHA	TWA 10 ppm (50 mg/m ³) STEL 15 ppm
		ACGIH	TWA: 10 ppm STEL: 15 ppm Skin 2B
		NIOSH	TWA 10 ppm (50 mg/m ³) ST 15 ppm (75 mg/m ³)
		Supplier	No Established Limit
Proprietary	1,2,4-trimethylbenzene	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	TWA 25 ppm (125 mg/m ³)
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
Proprietary	Naphthalene	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: Yes
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;

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EXPOSURE CONTROLS

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Protective safety glasses recommended
Skin	Impervious gloves are recommended.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Ensure emergency eye wash and shower stations are available in workplace. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and Chemical Properties

Appearance	Colorless Liquid
Odor	Hydrocarbon
Odor threshold	Not Measured
pH	N/A
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	360F
Flash Point	145F (TCC)
Evaporation rate (Ether = 1)	<0.1 (N-butyl acetate=1)
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 1.8 Upper Explosive Limit: 11.7
Vapor pressure (Pa)	<2mm Hg @20C
Vapor Density	<7 (air=1)
Specific Gravity	0.9 @25C (H2O=1)
Solubility in Water	Dispersible
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	<20.5
VOC Content	900 (grams/liter)
Freezing Point	-45F

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10. Stability and Reactivity

REACTIVITY

Hazardous Polymerization will not occur.

CHEMICAL STABILITY

Stable under normal circumstances.

POSSIBILITY OF HAZARDOUS REACTIONS

No data available.

CONDITIONS TO AVOID

Excessive heat and open flame.

INCOMPATIBLE MATERIALS

Strong oxidizing agents and acids.

HAZARDOUS DECOMPOSITION PRODUCTS

High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

11. Toxicological Information

ACUTE TOXICITY

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

CARCINOGENICITY: Materials in this product have been shown to cause skin tumors in mice after severe skin irritation and sometimes a long latency period.

GENOTOXICITY: Hydrotreated & hydrodesulfurized gas oils range in activity from inactive to weakly-positive in in-vitro bacterial mutagenicity assays.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Solvent naphtha (petroleum), heavy aromatic - (Proprietary)	> 5,000.00, Rat - Category: NA	>2,000.00, Rabbit - Category: 5	No data available	No data available	No data available
Naphthalene – (Proprietary)	490.00, Rat - Category: 4	20,000.00, Rabbit - Category: NA	No data available	No data available	100.00, Rat - Category: NA
Dipropyleneglycol n-butyl ether – (Proprietary)	4,000.00, Rat - Category: 5	2,000.00, Rat - Category: 4	No data available	No data available	No data available

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1-Butoxy-2-propanol - (Proprietary)	5,009.00, Rat - Category: NA	No data available	No data available	No data available	No data available
1,2,4-trimethylbenzene - (Proprietary)	3,400.00, Rat - Category: 5	3,160.00, Rabbit - Category: 5	18.00, Rat - Category: 4	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	5	May be harmful if swallowed. (Not adopted by US OSHA)
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation	3	Causes mild skin irritation. (Not adopted by US OSHA)
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	2	Suspected of causing cancer.
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	1	May be fatal if swallowed and enters airways.

12. Ecological Information

TOXICITY

Toxic to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Solvent naphtha (petroleum), heavy aromatic - (Proprietary)	45.00, Pimephales promelas	12.00, Daphnia magna	2.50 (72 hr), Skeletonema costatum
Naphthalene - (Proprietary)	0.99, Oncorhynchus gorbuscha	1.60, Daphnia magna	68.21 (96 hr), Scenedesmus subspicatus
Dipropyleneglycol n-butyl ether - (Proprietary)	841.00, Poecilia reticulata	1,000.00, Daphnia magna	Not Available
1-Butoxy-2-propanol - (Proprietary)	Not Available	Not Available	Not Available

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1,2,4-trimethylbenzene - (Proprietary)	7.72, Pimephales promelas	3.60, Daphnia magna	Not Available
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PERSISTENCE AND DEGRADABILITY

There is no data available on the preparation itself.

BIOACCUMULATIVE POTENTIAL

Not Measured

MOBILITY IN SOIL

No data available.

RESULTS OF PBT AND vPvB ASSESSMENT

This product contains no PBT/vPvB chemicals.

OTHER ADVERSE EFFECTS

No data available.

13. Disposal Considerations

WASTE TREATMENT METHODS

Observe all federal, state and local regulations when disposing of this substance.

14. Transport Information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN NUMBER	Not Applicable	Not Regulated	Not Regulated
UN PROPER SHIPPING NAME	Not Regulated	Not Regulated	Not Regulated
TRANSPORT HAZARD CLASS(ES)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
PACKING GROUP	Not Applicable	Not Applicable	Not Applicable

ENVIRONMENTAL HAZARDS

IMDG Marine Pollutant: Yes (Solvent naphtha (petroleum), heavy aromatic)

SPECIAL PRECAUTIONS FOR USER

No further information

15. Regulatory Information

REGULATORY OVERVIEW

The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

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TOXIC SUBSTANCE CONTROL ACT (TSCA)

All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS CLASSIFICATION

B3 D1B E

NFPA/HMIS RANKINGS



US EPA TIER II HAZARDS

Fire: Yes

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): Yes

EPCRA 311/312 CHEMICALS AND RQS (LBS):

Naphthalene (100.00)

EPCRA 302 EXTREMELY HAZARDOUS:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 TOXIC CHEMICALS:

1,2,4-trimethylbenzene

Naphthalene

PROPOSITION 65 - CARCINOGENS (>0.0%):

Naphthalene

PROPOSITION 65 - DEVELOPMENTAL TOXINS (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

PROPOSITION 65 - FEMALE REPRO TOXINS (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

PROPOSITION 65 - MALE REPRO TOXINS (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

NEW JERSEY RTK SUBSTANCES (>1%):

1,2,4-trimethylbenzene

Naphthalene

PENNSYLVANIA RTK SUBSTANCES (>1%):

1,2,4-trimethylbenzene

Naphthalene

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16. Other Information

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. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

H401 Toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

The information contained in the above SDS is intended for the exclusive use of BioChem Systems, Inc. The above data have been compiled primarily from the SDS supplied to BioChem Systems, Inc. by the manufacturer and/or supplier. While the information is believed to be pertinent and current, no warranty expressed or implied is given as to its accuracy. This SDS is to be used as a guideline for safe work practices and emergency response. Any questions regarding the safe use of this material not outlined above should be directed to the BioChem Systems, Inc. Technical Services Department.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

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