

Section 1. Product and Company Identification

Product Name: Tyfo® U, Component B
Supplier: FyfeFRP LLC | 621 Lockhaven Drive. Houston, TX 77073 | +1 281.590.8491
Emergency Phone Number: 800.424.9300 (CHEMTREC)
+1 703.741.5970 (Outside the US)
Product Description: Mixture
Product Use: For professional use only

Section 2. Hazards Identification**Classification of the substance or mixture**

Flammable liquids – Category 3
Aspiration Hazard – Category 1
Skin sensitization – Category 1
Specific Target Organ Toxicity (Single Exposure) – Category 3
Germ Cell Mutagenicity – Category 1
Carcinogenicity – Category 1B

Label Elements:**Hazard Statement(s):**

H226 Flammable liquid and vapour
H304 May be fatal if swallowed and enters airways
H317 May cause an allergic skin reaction
H336 May cause drowsiness or dizziness
H340 May cause genetic defects
H350 May cause cancer

Signal Word: Danger

Precautionary Statement(s):

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical, ventilating, lighting equipment
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P261 - Avoid breathing vapors.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves.


TYFO® U, COMPONENT B

P302+P352 - If on skin: Wash with plenty of soap and water
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
 P308+P313 - If exposed or concerned: Get medical advice/attention.
 P332+P313 - If skin irritation occurs: Get medical advice/attention.
 P362+P364 - Take off contaminated clothing and wash it before reuse.
 P370+P378 - In case of fire: Use carbon dioxide (CO₂), foam to extinguish.
 P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 P501 - Dispose of contents/container in accordance with local, regional, national and/or international regulation

Section 3. Composition/ Information on Ingredients

Chemical Name	CAS-No	Weight %
Hexane, 1,6-diisocyanato-, homopolymer	28182-81-2	75 – 95
N-Butyl Acetate	123-86-4	3 – 10
Aromatic Hydrocarbon	64742-95-6	3 – 10
1,6,-diisocyanatohexane	822-06-0	<1

Section 4. First Aid Measures
First Aid Measures for Accidental:

General: If exposed or concerned: Get medical advice/attention.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.

Ingestion: Call a poison center/doctor/physician if you feel unwell. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Eye contact: Rinse eyes with water as a precaution.

Skin contact: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.

Most important symptoms/effects, acute and delayed:

Symptoms/effects: May cause drowsiness or dizziness.

Symptoms/effects after inhalation: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact: May cause an allergic skin reaction.

Symptoms/effects after eye contact: Eye irritation.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: Water spray. Dry powder. Foam. Carbon dioxide.

Advice for Fire-fighters: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Specific Hazards Arising from the substance or mixture: Flammable liquid and vapour.



Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

For non-emergency personnel: No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

For emergency responders: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental Precautions: Avoid release to the environment. Notify authorities if product enters sewers or public waters.

Methods and Materials for Containment and Cleaning Up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Section 7. Handling and Storage

Precautions for safe handling: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Hygiene measures: Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Conditions for safe storage including any incompatibilities: Ground/bond container and receiving equipment. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Section 8. Exposure Controls / Personal Protection

Control Parameters (Exposure Limits):

Chemical Name	ACGIH- TWA (mg/m ³)
1,6-diisocyanatohexane (822-06-0)	0.005 ppm (Hexamethylene diisocyanate; USA; TWA exposure limit 8 h; TLV – Adopted Value)

Appropriate Engineering Control: Ensure good ventilation of the work station.

Personal Protective Equipment:

Respiratory Protection: Wear respiratory protection. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Eye Protection: Safety glasses.

Skin Protection: Wear suitable protective clothing. Protective gloves

Environmental exposure controls: Avoid release to the environment.

**Section 9. Physical and Chemical Properties**

Physical state:	Liquid
Appearance:	Clear, colorless liquid
Color:	Mixture contains one or more component(s) which have the following color(s): Colorless to light yellow
Odor:	Slight
Odor threshold:	No data available
pH:	No data available
Melting point:	No data available
Freezing point:	Not applicable
Boiling point:	262 °F
Flash point:	53 °C
Relative evaporation rate (butyl acetate=1):	No data available
Flammability (solid, gas):	Not applicable
Explosion limits:	Not applicable
Explosive properties:	No data available
Oxidizing properties:	No data available
Vapor pressure:	No data available
Density:	1.12 g/cm ³
Relative density:	No data available
Relative vapor density at 20 °C:	No data available
Solubility:	No data available
Log Pow:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available

Section 10. Stability and Reactivity

Reactivity: Flammable liquid and vapour.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous reactions: No dangerous reactions known under normal conditions of use.

Conditions to Avoid: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

Incompatible Materials / Chemicals: Strong oxidizing agents.

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

Section 11. Toxicological Information

Information on toxicological effects:

Acute toxicity: Not classified

Tyfo® U, Component B



ATE US (gases): 4500 ppmV/4h

ATE US (vapors): 11 mg/l/4h

ATE US (dust, mist): 1.5 mg/l/4h

1,6-diisocyanatohexane (822-06-0)

LD50 oral: 745 mg/kg (Rat)

LD50 dermal: 599 mg/kg (Rabbit)

LC50 inhalation: (mg/l) 0.31 mg/l/4h (Rat)

LC50 inhalation: (ppm) 45 ppm/4h (Rat)

ATE US (oral): 745 mg/kg body weight

ATE US (dermal): 599 mg/kg body weight

ATE US (gases): 45 ppmV/4h

ATE US (vapors): 0.31 mg/l/4h

ATE US (dust, mist): 0.31 mg/l/4h

Section 12. Ecological Information

Ecotoxicity: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

1,6-diisocyanatohexane (822-06-0)

LC50 fish: 1 22 mg/l (LC0; Other; 96 h; Brachydanio rerio; Static system)

EC50 Daphnia: 1 < 0.33 mg/l (EC0; Other; 24 h; Daphnia magna; Static system)

LC50 fish: 2 31 mg/l (LC100; Other; 96 h; Brachydanio rerio; Static system)

Persistence and degradability: No (test) data on mobility of the mixture.

Bioaccumulative potential: No additional information available

Mobility in soil: No additional information available for the mixture

Other adverse effects: No known effects from this product.

Section 13. Disposal Considerations

Waste treatment methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Flammable vapors may accumulate in the container

Uncleaned packaging: Do not re-use empty containers for food, clothing, or products for human or animal consumption, or where skin contact can occur. Dispose of container and unused contents in accordance with federal, state, and local regulations.

Section 14. Transport Information**DOT:**

UN number:

UN1263

UN proper shipping name:

PAINT

Transport hazard class:

3

Packing group:

III

Hazard labels (DOT):

3 - Flammable liquid



TYFO® U, COMPONENT B

Packaging Non Bulk (49 CFR 173.xxx): 173
Packaging Bulk (49 CFR 173.xxx): 242
Packaging Exceptions (49 CFR 173.xxx): 150
Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): 60 L
Quantity Limitations Cargo aircraft only (49 CFR 175.75): 220 L
Vessel Stowage Location: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Other information: No supplementary information available.

IMDG:

UN number: UN1263
UN proper shipping name: PAINT
Transport hazard class: 3
Packing group: III
Limited quantities: 5L

IATA:

UN number: UN1263
UN proper shipping name: PAINT
Transport hazard class: 3
Packing group: III

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Federal Regulations:

All ingredients are listed on the United States TSCA (Toxic Substances Control Act) inventory
 The following substances are reported for CERCLA:

Chemical Name	CERCLA LQ
n-butyl acetate (123-86-4)	5000 lb
1,6-diisocyanatohexane (822-06-0)	100 lb

International regulations

Canada: No additional information available

EU-Regulations: No additional information available

National regulations: No additional information available

US State regulations

New Jersey - Right to Know Hazardous Substance List
n-butyl acetate (123-86-4)

U.S. - Pennsylvania - RTK (Right to Know) List
n-butyl acetate (123-86-4)

U.S. - Massachusetts - Right To Know List
n-butyl acetate (123-86-4)

**TYFO® U, COMPONENT B****Section 16. Other Information****Key Legend Information:**

CAS:	Chemical Abstracts Service
IATA:	International Air Transport Association
ICAO:	International Civil Aviation Organization
IMDG:	International Maritime Dangerous Goods
NIOSH:	National Institute for Occupational Safety and Health
OSHA:	Occupational Safety and Health Administration

The information contained herein is based on the data available to us and is believed to be accurate. The data is offered in good faith as typical values and not as product specification. The information in this data sheet was compiled from information supplied by the vendors of the components of this compound. Fyfe Co., LLC makes no warranty either expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. The recommended industrial hygiene and safe handling procedures are believed to be genuinely applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. Fyfe Co., LLC assumes no responsibility for injury from the use of the product described herein. The information is intended only to assist in the safe handling of this material. Fyfe Co., LLC **DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR FREEDOM FROM PATENT INFRINGEMENT.** Fyfe Co., LLC **WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

Date of issue: 12.17.2018

Revision date: 02.08.2022

Version: 2.0