

**Section 1. Product and Company Identification**

**Product Name:** Tyfo® U, Component A  
**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  
Acute toxicity / Oral – Category 4  
Skin irritation – Category 2  
Eye damage / irritation – Category 2A  
Acute toxicity / Inhalation – Category 4  
Specific Target Organ Toxicity (Single Exposure) – Category 3  
Specific Target Organ Toxicity (Repeated Exposure) – Category 2  
Carcinogenicity – Category 1  
Aquatic Chronic – Category 2

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

H226 Flammable liquid and vapour  
H302 Harmful if swallowed  
H315 Causes skin irritation  
H319 Causes serious eye irritation  
H332 Harmful if inhaled  
H335 May cause respiratory irritation  
H373 May cause damage to organs through prolonged or repeated exposure  
H350 May cause cancer  
H412 Harmful to aquatic life with long lasting effects

**Signal Word:** Danger

**Precautionary Statement(s):**

P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
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.  
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 (CO<sub>2</sub>), 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 %
Microcrystalline Silica	14808-60-7	50 – 75
Titanium dioxide	13463-67-7	10 – 25
Parachlorobenzotrifluoride	98-56-6	10 – 25
Methyl N-Amylketone	110-43-0	2.5 – 10
Methyl Ethyl Ketone	78-93-3	2.5 – 10
N-Butyl Acetate	123-86-4	2.5 – 10

### 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 after inhalation: May cause respiratory irritation. Risk of serious damage to the lungs (by aspiration).

Symptoms/effects after skin contact: Irritation

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


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**Section 5. Fire Fighting Measures**

**Suitable Extinguishing Media:** Foam. Carbon dioxide. Water fog.

**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:** Highly 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 <sup>3</sup> )	OSHA - PEL - TWA (mg/m <sup>3</sup> )	NIOSH - REL - TWA (mg/m <sup>3</sup> )
Microcrystalline Silica	0.025 mg/m <sup>3</sup> (Silica-Crystalline Quartz; USA; TWA, Exposure limit 8 h; TLV – Adopted Value; Respirable fraction)	N/A	0.05 mg/m <sup>3</sup> respirable dust



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Titanium dioxide	10 mg/m <sup>3</sup> (Titanium dioxide; USA; TWA - exposure limit 8 h; TLV - Adopted Value)	15 mg/m <sup>3</sup>	N/A
Methyl N-Amylketone	50 ppm (Methyl n-amyl ketone; USA; TWA- exposure limit 8 h; TLV - Adopted Value)	465 mg/m <sup>3</sup> (100 ppm)	N/A

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

**Personal Protective Equipment:**

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

**Eye / Face Protection:** Safety glasses. Insufficient ventilation: wear respiratory protection.

**Skin Protection:** Wear suitable protective clothing. Protective gloves

**Environmental exposure controls:** Avoid release to the environment.

### Section 9. Physical and Chemical Properties

<b>Physical state:</b>	Liquid
<b>Color:</b>	No data available
<b>Odor:</b>	Solvent
<b>Odor threshold:</b>	No data available
<b>pH:</b>	No data available
<b>Melting point:</b>	No data available
<b>Freezing point:</b>	Not applicable
<b>Boiling point:</b>	173 - 401 °F
<b>Flash point:</b>	22 °C
<b>Relative evaporation rate (butyl acetate=1):</b>	No data available
<b>Flammability (solid, gas):</b>	Not applicable
<b>Explosion limits:</b>	Not applicable
<b>Explosive properties:</b>	No data available
<b>Oxidizing properties:</b>	No data available
<b>Vapor pressure:</b>	No data available
<b>Density:</b>	No data available
<b>Relative density:</b>	No data available
<b>Relative vapor density at 20 °C:</b>	No data available
<b>Solubility:</b>	No data available
<b>Log Pow:</b>	No data available
<b>Auto-ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Viscosity:</b>	No data available
<b>VOC content:</b>	157 g/l

### Section 10. Stability and Reactivity

**Reactivity:** Highly flammable liquid and vapour.

**Chemical Stability:** Stable under normal conditions.


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**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

**Titanium Dioxide (13463-67-7)**

LD50 oral > 10,000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)

LD50 dermal rabbit > 10,000 mg/kg (Rabbit; Literature study)

LC50 inhalation rat (mg/l) > 6.8 mg/l/4h (Rat; Experimental value)

IARC group 2B - Possibly carcinogenic to humans

**Parachlorobenzotrifluoride (98-56-6)**

LD50 oral: 13,000 mg/kg (Rat)

LD50 dermal: > ,2000 mg/kg (Rabbit)

LC50 inhalation: 33 mg/l/4h (Rat)

ATE US (oral): 13000 mg/kg body weight

ATE US (vapors): 33 mg/l/4h

ATE US (dust, mist): 33 mg/l/4h

**Methyl N-Amylketone (110-43-0)**

LD50 oral: 1,670 mg/kg (Experimental value; 1600 mg/kg bodyweight - rat)

LD50 dermal: 10,300 mg/kg (Experimental value; OECD 402: Acute Dermal Toxicity; >2000 mg/kg bodyweight - rabbit)

LC50 inhalation rat (mg/l) 14 mg/l/4h (Rat; Experimental value; >16.7 mg/l/4h - Rat)

ATE US (oral): 1,670 mg/kg body weight

ATE US (dermal): 10,300 mg/kg body weight

ATE US (gases): 4,500 ppmV/4h

ATE US (vapors): 14 mg/l/4h

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

**Crystalline Silica (14808-60-7)**

IARC group 1 - Carcinogenic to humans.

**Section 12. Ecological Information**

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


**TYFO® U, COMPONENT A**
**Titanium Dioxide (13463-67-7)**

EC50 Daphnia: > 100 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; Daphnia magna; Static system; Fresh water; Weight of evidence)

Threshold limit algae: 61 mg/l (EC50; Other; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)

**Parachlorobenzotrifluoride (98-56-6)**

LC50 fish: 11.4 mg/l (LC50; 72 h; Lepomis macrochirus)

EC50 Daphnia: 3.68 mg/l (EC50; 48 h)

**Methyl N-Amylketone (110-43-0)**

LC50 fish: 131 mg/l (LC50; EPA OPP 72-1; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)

EC50 Daphnia > 90.1 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Semi-static system; Fresh water; Experimental value)

Threshold limit algae: 98.2 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)

**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:	II
Environmental hazard:	No
Hazard labels (DOT):	3 - Flammable liquid
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):	5 L
Quantity Limitations Cargo aircraft only (49 CFR 175.75):	60 L


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**Vessel Stowage Location:** B - (i) The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) “On deck only” on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

**Other information:** No supplementary information available.

**IMDG:**

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

**IATA:**

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

**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:

CERCLA RQ: 5000 lb

Methyl ethyl ketone (78-93-3)

N-Butyl Acetate (123-86-4)

**International regulations**

**Canada:** No additional information available

**EU-Regulations:** No additional information available

**National regulations**

**Quartz (14808-60-7):** Listed on IARC (International Agency for Research on Cancer)

**Titanium Dioxide (13463-67-7):** Listed on IARC (International Agency for Research on Cancer)

**US State regulations**

Listed in California - Proposition 65 – Carcinogens

Quartz (14808-60-7)

New Jersey - Right to Know Hazardous Substance List

Quartz (14808-60-7)

Titanium Dioxide (13463-67-7)

Methyl N-Amylketone (110-43-0)

Methyl ethyl ketone (78-93-3)

n-butyl acetate (123-86-4)

U.S. - Pennsylvania - RTK (Right to Know) List

Methyl ethyl ketone (78-93-3)

n-butyl acetate (123-86-4)





U.S. - Massachusetts - Right To Know List  
Methyl ethyl ketone (78-93-3)  
n-butyl acetate (123-86-4)

**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

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