


TYFO® RR
Section 1. Product and Company Identification

Product Name: Tyfo® RR
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

Skin sensitization – Category 1
 Eye damage/irritation – Category 2A
 Carcinogenicity – Category 1A
 Specific Target Organ Toxicity – Category 1

Label Elements:

Hazard Statement(s):

H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H350 May cause cancer
 H372 Causes damage to organs through prolonged or repeated exposure

Signal Word: Danger

Precautionary Statement(s):

P261 - Avoid breathing vapors
 P264 - Wash hands thoroughly after handling
 P271 - Use only outdoors or in a well-ventilated area
 P272 - Contaminated work clothing must not be allowed out of the workplace
 P280 - Wear eye protection, protective clothing, protective gloves
 P302+P352 - If on skin: Wash with plenty of water
 P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P362+P364 - Take off contaminated clothing and wash it before reuse
 P363 - Wash contaminated clothing before reuse
 P403+P233 - Store in a well-ventilated place. Keep container tightly closed
 P405 - Store locked up
 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 %
Crystalline Silica	14808-60-7	<2
Titanium Dioxide	13463-67-7	<1
4,4-Dimethyloxazolidine	51200-87-4	<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.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

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

Most important symptoms/effects, acute and delayed:

Symptoms/injuries after inhalation: May cause respiratory irritation

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

Symptoms/injuries after eye contact: Serious damage to eyes.

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.

Special protective equipment and precautions for fire-fighters:

Protection during firefighting: 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:

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

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures: Incomplete combustion of dried product releases dangerous carbon monoxide, carbon dioxide and other toxic gases. spillage area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Incomplete combustion of dried product releases dangerous carbon monoxide, carbon dioxide and other toxic gases. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Ventilate

Environmental Precautions: Avoid release to the environment.


TYFO® RR

Methods and Materials for Containment and Cleaning Up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Dispose of materials or solid residues at an authorized site.

Section 7. Handling and Storage

Precautions for safe handling: Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Hygiene measures: 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: Keep container tightly closed. Store locked up. Store in a dry, cool and well-ventilated place.

Section 8. Exposure Controls / Personal Protection

Control Parameters (Exposure Limits):

Chemical Name	ACGIH- TWA (mg/m ³)	OSHA PEL- TWA (mg/m ³)
Crystalline Silica	0.025 mg/m ³ (TWA) - exposure limit 8 h; TLV – Adopted Value; Respirable fraction	-
Titanium Dioxide	10 mg/m ³ (TWA) exposure limit 8 h (TLV)	15 mg/m ³

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: Wear safety glasses.

Skin Protection: Wear suitable protective clothing. Wear gloves

Environmental exposure controls: Avoid release to the environment.

Section 9. Physical and Chemical Properties

Physical state:	Liquid
Color:	White and/or colored.
Odor:	Ammonia odour
Odor threshold:	No data available
pH:	8 – 10
Melting point:	Not applicable
Freezing point:	No data available
Boiling point:	190 - 212 °F
Flash point:	No data available
Relative evaporation rate (butyl acetate=1):	No data available
Flammability (solid, gas):	No data available


TYFO® RR

Explosion limits:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available
Vapor pressure:	No data available
Relative density:	No data available
Relative vapor density at 20 °C:	No data available
Specific Gravity / density:	1.95 g/cm ³
Solubility:	No data available
Log Pow:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, dynamic:	No data available
Explosion limits:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available
VOC content:	7 g/l

Section 10. Stability and Reactivity

Reactivity: None known.

Chemical Stability: Stable under normal conditions.

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

Conditions to Avoid: None under recommended storage and handling conditions (see section 7).

Incompatible Materials / Chemicals: No additional information available.

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

Chemical Name	LD50 Oral	LD50 dermal	LC50 inhalation
Titanium Dioxide (13463-67-7)	>10,000 mg/kg - Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value >5,000 mg/kg bodyweight; Rat; Experimental value	>10,000 mg/kg (Rabbit; Literature study)	>6.8 mg/l/4h (Rat; Experimental value)
4,4-Dimethyloxazolidine (51200-87-4)	500 mg/kg body weight (ATE)	1,100 mg/kg body weight (ATE)	4,500 ppmV/4h (dermal)- ATE 11 mg/l/4h (vapors)- ATE 1.5 mg/l/4h (dust, mist)- ATE

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: May cause an allergic skin reaction.



Germ cell mutagenicity: Not classified.

Carcinogenicity: May cause cancer.

Reproductive toxicity: Not classified

Specific target organ toxicity – single exposure: Not classified.

Specific target organ toxicity – repeated exposure: Causes damage to organs through prolonged or repeated exposure

Aspiration hazard: Not classified

Symptoms/injuries after inhalation: May cause respiratory irritation

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

Symptoms/injuries after eye contact: Serious damage to eyes.

Section 12. Ecological Information

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

Toxicity:

Ingredients	Threshold limit algae	EC50 Daphnia
Titanium Dioxide (13463-67-7)	61 mg/l (EC50; Other; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)	> 100 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; Daphnia magna; Static system; Fresh water; Weight of evidence)

Persistence and degradability: No data available for the mixture.

Bioaccumulative potential: No data available for the mixture.

Mobility in soil: No data available for the mixture.

Other adverse effects: No known ecological damage caused by 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.

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

US DOT: Not regulated for transport.

Section 15. Regulatory Information

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

Federal Regulations:

The ingredients are listed on the United States TSCA (Toxic Substances Control Act) inventory



TYFO® RR

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:

Quartz (14808-60-7): U.S. - New Jersey - Right to Know Hazardous Substance List

Titanium Dioxide (13463-67-7): U.S. - New Jersey - Right to Know Hazardous Substance List

Section 16. Other Information**HMIS Rating:****Health – 1****Flammability – 0****Physical – 0****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: 03.26.2020

Revision date: 02.03.2022

Version: 2.0