

# MATERIAL SAFETY DATA SHEET

**MSDS IDENTIFICATION NAME:** TYFO® RR  
**MSDS NUMBER:** TYFO-RR-001

**DATE:** June 15, 2010 **PAGE:** 1 OF 5  
**SUPERSEDES MSDS:** 10/21/2009

## SECTION I: MATERIAL AND MANUFACTURER IDENTIFICATION

**MANUFACTURER:**  
FYFE CO. LLC  
8380 Miralani Drive  
San Diego, CA 92126

**EMERGENCY TELEPHONE NUMBER:**  
800-424-9300 or 703-527-3887  
**INFORMATION TELEPHONE NUMBER:**  
858-642-0694

**PRODUCT IDENTIFICATION NUMBER:** TYFO® RR  
**CHEMICAL FAMILY:** Acrylic Binder

## SECTION II: COMPOSITION / INFORMATION ON INGREDIENTS

MATERIAL OR COMPONENT	CAS NUMBER	% BY WEIGHT	OSHA(PEL)	ACGIH(TLV)
Calcium Carbonate	1317-65-3	--	15 mg/m <sup>3</sup> (TOTAL) 5 mg/m <sup>3</sup> (RESP)	10 mg/m <sup>3</sup>
Titanium Dioxide	13463-67-7	--	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Diatomaceous Earth	61790-53-2	--	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Crystalline Silica	14808-60-7	--	10 mg/m <sup>3</sup>	0.10 mg/m <sup>3</sup>
3-(3,4-dichlorophenyl)-1, 1-dimethyl-urea	330-54-1	--	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>

## SECTION III: HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:**

**APPEARANCE AND ODOR:**

Rock-like grey fluid with slight odor.

**STATEMENTS OF HAZARD: CAUTION ! MAY CAUSE SKIN AND EYE IRRITATION AND SKIN SENSITIZATION.**

**PRIMARY ROUTES OF EXPOSURE:**

EYES--YES    SKIN CONTACT--YES    INHALATION--NO    INGESTION--NO

**HMIS RATING:**

HEALTH--1    FLAMMABILITY--0    REACTIVITY--0    SPECIAL--NONE

**POTENTIAL HEALTH EFFECTS:**

**EYES:** Contact with eyes can cause irritation.

**SKIN:** Prolonged or repeated contact with skin can cause irritation.

**INHALATION:** When applying this product by spray, or when sanding the dry product, the vapors and/or dust produced can cause irritation to the respiratory tract.

**INGESTION:** May be harmful if ingested.

CHRONIC (CANCER) INFORMATION: WARNING – see section 11, TOXICOLOGICAL INFORMATION for details. Also see section 15.

TERATOLOGY (BIRTH DEFECTS): Not known to cause birth defects.

REPRODUCTIVE INFORMATION: Not known to cause reproductive harm.

#### SECTION IV: FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**SKIN CONTACT:** Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. Get medical attention if irritation develops.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, qualified personnel may administer oxygen. Get immediate medical attention.

**INGESTION:** Get medical attention immediately. Do not induce vomiting.

#### SECTION V: FIRE FIGHTING MEASURES

**FLASH POINT/METHOD OF DETERMINATION:** Not Applicable – Water based product

Flammable Limits:

Lower flammable limit: Not Applicable

Upper Flammable limit: Not Applicable

AUTOIGNITION TEMPERATURE: Not Applicable

HAZARDOUS COMBUSTION PRODUCTS: Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide.

EXTINGUISHING MEDIA: For the dried product, use carbon dioxide, dry chemical, or alcohol foam extinguishing media.

**FIREFIGHTING INSTRUCTIONS:** Respiratory equipment should be worn to avoid inhalation of combustion products. Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and explosion when exposed to extreme heat.

#### SECTION VI: ACCIDENTAL RELEASE MEASURES

**PROCEDURES IN CASE OF ACCIDENTAL RELEASE OF LEAKAGE:** Ventilate area. Dike spill using absorbent, inert materials. Transfer to containers for disposal. Keep spilled products out of sewers, streams, and water systems. See section 13 and section 15 for specific regulatory information concerning this product.

#### SECTION VII: HANDLING AND STORAGE

**HANDLING:** Wear appropriate protective equipment when working with this product. Keep containers closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Keep out of reach of children.

**STORAGE:** Avoid temperature extremes in storage. Do not allow to freeze. Consult the Technical Data Sheet for specific storage instructions.

### SECTION VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION

**WARNING!** If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log onto [www.epa.gov/lead](http://www.epa.gov/lead).

**VENTILATION:** Use local exhaust. General exhaust acceptable if the exposure to materials in section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107 and 1910.108.

**RESPIRATORY PROTECTION:** If personal exposure cannot be controlled below applicable limits of ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH for protection against materials described in Section 2.

**SKIN PROTECTION:** Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

**EYE/FACE PROTECTION:** Wear safety glasses to reduce the potential for eye contact.

**GENERAL HYGIENE RECOMMENDATIONS:** Before eating, drinking, smoking or using toilet facilities, wash face and hands thoroughly with soap and water. Remove any contaminated clothing and launder before reuse. Properly dispose of shoes and clothing that are extremely contaminated. Use vacuum equipment to remove cured product dust from clothing and work areas. Compressed air is not recommended.

### SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE</b>	Opaque white/ grey color
<b>ODOR</b>	Mild ammonia
<b>BOILING POINT</b>	190-212°F
<b>FREEZING/MELTING POINT (°F/°C)</b>	32°F
<b>SPECIFIC GRAVITY ( WATER = 1)</b>	1.160-1.170
<b>EVAPORATION RATE</b>	Slower than ether.
<b>SOLUBILITY IN WATER</b>	Dispersible
<b>DENSITY</b>	16.4 lb/gal
<b>VAPOR DENSITY</b>	Heavier than air
<b>VOC</b>	0.087 lb/gal (10 g/l)
<b>PHYSICAL STATE</b>	Fluid
<b>SPECIFIC GRAVITY</b>	1.97
<b>pH</b>	8.0 – 10.0

### SECTION X: STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable under normal handling and storage conditions.

**INCOMPATIBLE MATERIALS:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Low molecular weight hydrocarbons, carbon dioxide and monoxide.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions of use.

**SECTION XI: TOXICOLOGICAL INFORMATION****MATERIAL OR COMPONENT TOXICITY DATA:**

**CRYSTALLINE SILICA** – (Quartz, Christobalite) is considered a known human carcinogen by federal (OSHA) and advising health agencies (IARC, NIOSH, and NTP). Additionally, crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. **MINERAL DUSTS** – some items mentioned in section 2 of this MSDS are considered mineral dusts by OSHA and a correctly fitted, NIOSH approved respirator is required when working with this product. **TITANIUM DIOXIDE** – is considered suspected carcinogen by advising health agencies. There is one animal study where titanium dioxide exposure caused lung cancer in rats. However, the level of exposure during the test was far in excess of what would be experienced by workers during use of this product. However, care should be exercised and the use of a correctly fitted, NIOSH approved respirator should be used when working with this product.

**SECTION XII: ECOLOGICAL INFORMATION**

There is no data available about this topic.

**SECTION XIII: DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL METHODS:** This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material.

**SECTION XIV: TRANSPORTATION INFORMATION**

**US DOT PROPER SHIPPING DESCRIPTION:** Paint and related materials, NOIBN.

**SECTION XV: REGULATORY INFORMATION****CERCLA – SECTION 103 (40CRF302.4)**

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ).

\*\* No reportable quantities are present\*\*

**CLEAN AIR ACT – SECTION 112:**

This product contains the following components present at or above the minimum level and listed as extremely hazardous air pollutants:

\*\* No reportable quantities are present\*\*

**EPA VOC REGULATIONS:**

THEORETICAL VOC FOR THIS PRODUCT = 0.087 LB/GAL (10 g/l)

**OSHA:**

This MSDS is prepared to comply with the US Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standard.

In addition to the items listed in section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 2 of this MSDS.

TITANIUM DIOXIDE 13463-67-7

**SECTION XV: REGULATORY INFORMATION (CONTINUED)**

SARA SECTION 302 (40CFR355.30) AND SECTION 304 (40CFR355.40):

This product contains the following chemicals that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on Reportable Quantities (RQ):

\*\* No reportable quantities are present\*\*

SARA SECTION 311/312 (40CFR370.21) HAZARD CLASSIFICATION FOR THIS PRODUCT:

FIRE: NO      PRESSURE GENERATING: NO      REACTIVITY: NO ACUTE HEALTH: NO

CHRONIC HEALTH: NO

SARA SECTION 313 (40CFR372.65):

This product contains the following substances subject to the reporting requirements of Section 313 of TITLE III of the Superfund Amendment and Reauthorization Act of 1968:

\*\* No reportable quantities are present\*\*

TSCA:

All components of this product are listed, or are exempt from listing on the TSCA inventory.

STATE REGULATIONS:

CALIFORNIA

WARNING: the following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm.

<b>Chemical name</b>	<b>CAS Number</b>
CALCIUM CARBONATE	1317-65-3
CRYSTALLINE SILICA	14808-60-7
ETHYL ACRYLATE	140-88-5
3-(3,4-dichlorophenyl) -1, 1-dimethyl-urea	330-54-1
SODIUM HEXAMETAPHOSPHATE	66915-31-1
FORMALDEHYDE	50-00-0

**SECTION XVI: OTHER INFORMATION**

The information and recommendation set forth are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to Fyfe Co. from its suppliers, and because Fyfe Co. has no control over the conditions of handling and use, Fyfe Co. makes no warranty, expressed or implied, regarding the accuracy of the data or the results obtained from the use thereof. The information and consideration, and Fyfe Co. assumes no responsibility from use or reliance thereon. It is the responsibility of the user of Fyfe Co. products to comply with all applicable federal, state, and local laws and regulations. WE DISCLAIM LIABILITY FOR DAMAGE OR INJURY INCURRING DIRECTLY OR INDIRECTLY FROM THE USE OF THIS PRODUCT.

APPROVED AND AUTHORIZED BY: *Edward R. Fyfe*