

# TYCO CPVC TFP-600 One Step Solvent Cement SDS (Safety Data Sheet)

# **SAFETY DATA SHEET**

1. Identification

Product identifier TFP-600 Blazemaster CPVC Cement

Other means of identification None

Recommended use Joining CPVC Pipes
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name Oatey Co.

Address 4700 West 160th St.

Cleveland, OH 44135

 Telephone
 216-267-7100

 E-mail
 info@oatey.com

**Transport emergency** Chemtrec 1-800-424-9300 (Outside the US 1-703-527-3887)

Emergency first aid 1-877-740-5015
Contact person MSDS Coordinator

Supplier

Company name Tyco Fire Protection Products
Address 1400 Pennbrook Parkway
Lansdale, PA 19446

 Telephone
 215-362-0700

 E-mail
 PSRA@tycofp.com

Transport emergency Chemtrec 1-800-424-9300 (Outside the US 1-703-527-3887)

Emergency first aid 1-877-740-5015
Contact person Product Stewardship

**IMPORTANT** 

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

Section 1 excerpted from: Oatey 935557 SDS US

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## 2. Hazard(s) identification

Physical hazards Flammable liquids Category 2 **Health hazards** Acute toxicity, oral Category 4 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A

Not classified

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Specific target organ toxicity, single exposure Category 3 narcotic effects

Aspiration hazard Category 1

**OSHA** defined hazards

Label elements



Signal word Danger

**Hazard statement** Highly flammable liquid and vapor. Harmful if swallowed. May be fatal if swallowed and enters

airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May

cause drowsiness or dizziness

**Precautionary statement** 

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

closed. Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. If Response

on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to

extinguish.

Storage Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. Disposal

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Hazard(s) not otherwise classified (HNOC) May form explosive peroxides. Contains a chemical classified by the US EPA as a suspected

possible carcinogen.

Supplemental information Not applicable.

## 3. Composition/information on ingredients

## **Mixtures**

Chemical name	CAS number	%	
Furan, Tetrahydro-	109-99-9	30-60	
Methyl ethyl ketone	78-93-3	10-30	
Ethene, chloro-, homopolymer, chlorinated	68648-82-8	10-20	
Acetone	67-64-1	5-15 5-15	
Cyclohexanone	108-94-1		
Silica, amorphous, fumed	112945-52-5	1-5	

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician if you feel unwell.

Skin contact

Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Call a physician or poison control center immediately. Do not induce vomiting. If vomiting occurs, Ingestion

keep head low so that stomach content doesn't get into the lungs. Aspiration may cause

pulmonary edema and pneumonitis.

Most important symptoms/effects, acute and delayed

Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Skin irritation. May cause redness and pain. Irritation of nose and throat.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

media

Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

and precautions for firefighters

Fire fighting

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do

so without risk

equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods General fire hazards

Highly flammable liquid and vapor. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age.

# 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

#### **Environmental precautions**

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## 7. Handling and storage

## Precautions for safe handling

Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

## Occupational exposure limits

## US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Acetone (CAS 67-64-1)         PEL         2400 mg/m3 1000 ppm           Cyclohexanone (CAS 108-94-1)         PEL         200 mg/m3 1000 ppm           Furan, Tetrahydro- (CAS 109-99-9)         PEL         590 mg/m3 1000 ppm           Methyl ethyl ketone (CAS 78-93-3)         PEL         590 mg/m3 200 ppm           US. OSHA Table Z-3 (29 CFR 1910.1000)         Type         Value           Components         Type         Value           Silica, amorphous, fumed (CAS 112945-52-5)         TWA 0.8 mg/m3 (CAS 112945-52-5)           US. ACGIH Threshold Limit Values         Type         Value           Components         Type         Value           Acetone (CAS 67-64-1)         STEL 500 ppm         500 ppm           Cyclohexanone (CAS 57-64-1)         TWA 250 ppm         250 ppm           Cyclohexanone (CAS 57-64-1)         TWA 20 ppm         50 ppm           Furan, Tetrahydro- (CAS 5TEL 300 ppm         300 ppm         300 ppm           Wethyl ethyl ketone (CAS 78-78-93-3)         TWA 200 ppm         200 ppm           US. NIOSH: Pocket Guide to Chemical Hazards         Components 7ype Value         700 ppm           Cyclohexanone (CAS 67-64-1)         TWA 590 mg/m3 250 ppm         250 ppm           Cyclohexanone (CAS 67-64-1)         TWA 590 mg/m3 200 ppm         250 ppm	Components	Туре	Value	
Cyclohexanone (CAS 108-94-1)         PEL         200 mg/m3           Furan, Tetrahydro- (CAS 109-99-9)         PEL         590 mg/m3           Methyl ethyl ketone (CAS 78-93-3)         PEL         590 mg/m3           US. OSHA Table Z-3 (29 CFR 1910.1000)           Components         Type         Value           Silica, amorphous, fumed (CAS 112945-52-5)         Type         Value           Components         Type         Value           Acetone (CAS 67-64-1)         STEL 500 ppm           Cyclohexanone (CAS 67-64-1)         STEL 500 ppm           Cyclohexanone (CAS 57-64-1)         TWA 200 ppm           Furan, Tetrahydro- (CAS 57-64-1)         STEL 1000 ppm           100-99-9)           WA 50 ppm           Methyl ketone (CAS 57-64-1)         TWA 500 ppm           US. NIOSH: Pocket Guide to Chemical Hazards           Components         Type         Value           Acetone (CAS 67-64-1)         TWA 500 mg/m3           108-94-1)         250 ppm           Cyclohexanone (CAS 67-64-1)         TWA 500 mg/m3           109-99-9)         250 ppm           Cyclohexanone (CAS	Acetone (CAS 67-64-1)	PEL	2400 mg/m3	
108-94-1) Furan, Tetrahydro- (CAS 109-99-9)  Methyl ethyl ketone (CAS 78-93-3)  COMponents  Type  Silica, amorphous, fumed (CAS 112945-52-5)  US. ACGIH Threshold Limit Values  Components  Type  Value  Silica, amorphous, fumed (CAS 112945-52-5)  US. ACGIH Threshold Limit Values  Components  Type  Value  Components  Type  Value  Acetone (CAS 67-64-1)  TWA 250 ppm  Cyclohexanone (CAS 351-64-1)  TWA 20 ppm  Furan, Tetrahydro- (CAS 5TEL 100 ppm  Methyl ethyl ketone (CAS 5TEL 100 ppm  WA 50 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  US. NIOSH: Pocket Guide to Chemical Hazarts  Components  Type  Value  Acetone (CAS 67-64-1)  TWA 200 ppm  US. NIOSH: Pocket Guide to Chemical Hazarts  Components  Type  Value  Acetone (CAS 67-64-1)  TWA 200 ppm  US. NIOSH: Pocket Guide to Chemical Hazarts  Components  Type  Value  Acetone (CAS 67-64-1)  TWA 590 mg/m3  250 ppm  Cyclohexanone (CAS 5TEL 735 mg/m3  108-94-1)  Expan Tetrahydro- (CAS 5TEL 735 mg/m3  108-99-9)  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  TWA 590 mg/m3  200 ppm			1000 ppm	
Furan, Tetrahydro- (CAS 109-99-9)         PEL         590 mg/m3           Responsion (CAS 78-93-3)         PEL         590 mg/m3           US. OSHA Table Z-3 (29 CFR 1910.1000)         Type         Value           Silica, amorphous, furned (CAS 112945-52-5)         TWA         0.8 mg/m3           US. ACGIH Threshold Limit Values         TWA         0.8 mg/m3           Components         Type         Value           Acetone (CAS 67-64-1)         STEL         500 ppm           Cyclohexanone (CAS         STEL         500 ppm           Cyclohexanone (CAS         STEL         50 ppm           108-94-1)         TWA         20 ppm           Furan, Tetrahydro- (CAS         STEL         100 ppm           109-99-9)         TWA         50 ppm           Methyl ethyl ketone (CAS         STEL         300 ppm           US. NIOSH: Pocket Guide to Chemical Hazarts         TWA         200 ppm           US. NIOSH: Pocket Guide to Chemical Hazarts         TWA         590 mg/m3           Cyclohexanone (CAS 67-64-1)         TWA         590 mg/m3           Cyclohexanone (CAS 67-64-1)         TWA         590 mg/m3           108-94-1)         25 ppm           Furan, Tetrahydro- (CAS         STEL         735 mg/m3		PEL	200 mg/m3	
Methyl ethyl ketone (CAS   PEL   590 mg/m3   200 ppm			50 ppm	
Value		PEL	590 mg/m3	
March   Marc		PEL	590 mg/m3	
Components         Type         Value           Silica, amorphous, furned (CAS 112945-52-5)         TWA         0.8 mg/m3           US. ACGIH Threshold Limit Values           Components         Type         Value           Acetone (CAS 67-64-1)         STEL         500 ppm           Cyclohexanone (CAS         STEL         500 ppm           108-94-1)         TWA         250 ppm           Furan, Tetrahydro- (CAS         STEL         100 ppm           109-99-9)         TWA         50 ppm           Methyl ethyl ketone (CAS         STEL         300 ppm           78-93-3)         TWA         200 ppm           US. NIOSH: Pocket Guide to Chemical Hazards           Components         Type         Value           Acetone (CAS 67-64-1)         TWA         590 mg/m3           Cyclohexanone (CAS         TWA         100 mg/m3           108-94-1)         25 ppm           Furan, Tetrahydro- (CAS         STEL         735 mg/m3           109-99-9)         250 ppm           Methyl ethyl ketone (CAS         STEL         85 mg/m3           78-93-3)         200 ppm           Methyl ethyl ketone (CAS         STEL         85 mg/m3	,	0 1000)	200 ppm	
Silica, amorphous, furned (CAS 112945-52-5)   20 mppcf		•	Value	
CAS 112945-52-5    US. ACGIH Threshold Limit Values				
Components         Type         Value           Acetone (CAS 67-64-1)         STEL         500 ppm           Cyclohexanone (CAS         STEL         50 ppm           108-94-1)         TWA         250 ppm           Furan, Tetrahydro- (CAS         STEL         100 ppm           109-99-9)         TWA         50 ppm           Methyl ethyl ketone (CAS         STEL         300 ppm           78-93-3)         TWA         200 ppm           US. NIOSH: Pocket Guide to Chemical Hazards         Value           Components         Type         Value           Acetone (CAS 67-64-1)         TWA         590 mg/m3           Cyclohexanone (CAS         TWA         100 mg/m3           108-94-1)         25 ppm           Furan, Tetrahydro- (CAS         STEL         735 mg/m3           109-99-9)         TWA         590 mg/m3           09-99-9)         250 ppm           Methyl ethyl ketone (CAS         STEL         885 mg/m3           78-93-3)         300 ppm           Methyl ethyl ketone (CAS         STEL         300 ppm           Methyl ethyl ketone (CAS         STEL         300 ppm           Methyl ethyl ketone (CAS         TWA         590 mg/m3		TWA	0.8 mg/m3	
Components         Type         Value           Acetone (CAS 67-64-1)         STEL         500 ppm           TWA         250 ppm           Cyclohexanone (CAS         STEL         50 ppm           108-94-1)         TWA         20 ppm           Furan, Tetrahydro- (CAS         STEL         100 ppm           109-99-9)         TWA         50 ppm           Methyl ethyl ketone (CAS         STEL         300 ppm           78-93-3)         TWA         200 ppm           US. NIOSH: Pocket Guide to Chemical Hazards         Components         Type         Value           Acetone (CAS 67-64-1)         TWA         590 mg/m3         250 ppm           Cyclohexanone (CAS         TWA         100 mg/m3         108-94-1)           Furan, Tetrahydro- (CAS         STEL         735 mg/m3         200 ppm           Furan, Tetrahydro- (CAS         STEL         735 mg/m3         200 ppm           Methyl ethyl ketone (CAS         STEL         885 mg/m3         300 ppm           Methyl ethyl ketone (CAS         STEL         885 mg/m3         300 ppm           Silica, amorphous, fumed         TWA         6 mg/m3         200 ppm			20 mppcf	
Acetone (CAS 67-64-1) STEL 500 ppm  TWA 250 ppm  Cyclohexanone (CAS STEL 50 ppm  108-94-1) TWA 20 ppm  Furan, Tetrahydro- (CAS STEL 100 ppm  Methyl ethyl ketone (CAS STEL 300 ppm  WS. NIOSH: Pocket Guide to Chemical Hazards  Components Type Value  Acetone (CAS 67-64-1) TWA 590 mg/m3  108-94-1) 25 ppm  Furan, Tetrahydro- (CAS TEL 735 mg/m3  109-99-9) TWA 590 mg/m3  200 ppm  WS. NIOSH: Pocket Guide to Chemical Hazards  Components Type Value  Acetone (CAS 67-64-1) TWA 590 mg/m3  250 ppm  Furan, Tetrahydro- (CAS STEL 735 mg/m3  109-99-9) 250 ppm  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS STEL 885 mg/m3  78-93-3) TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS STEL 885 mg/m3  TWA 590 mg/m3  200 ppm  Silica, amorphous, furned TWA 6 mg/m3	US. ACGIH Threshold Limit Value	es		
Cyclohexanone (CAS 108-94-1)         TWA 50 ppm           Furan, Tetrahydro- (CAS 109-99-9)         TWA 50 ppm           Furan, Tetrahydro- (CAS 109-99-9)         TWA 50 ppm           Methyl ethyl ketone (CAS 78-93-3)         TWA 200 ppm           US. NIOSH: Pocket Guide to Chemical Hazards         TWA 200 ppm           US. NIOSH: Pocket Guide to Chemical Hazards         TWA 250 ppm           Components Type Value         Value           Acetone (CAS 67-64-1)         TWA 590 mg/m3 250 ppm           Cyclohexanone (CAS TWA 100 mg/m3 108-94-1)         25 ppm           Furan, Tetrahydro- (CAS STEL 735 mg/m3 109-99-9)         STEL 735 mg/m3 200 ppm           Methyl ethyl ketone (CAS TWA 590 mg/m3 200 ppm         300 ppm           Methyl ethyl ketone (CAS TR-93-3)         TWA 590 mg/m3 200 ppm           STEL 300 ppm         300 ppm           Methyl ethyl ketone (CAS TR-93-3)         TWA 590 mg/m3 200 ppm           SIlica, amorphous, fumed TWA 6 mg/m3         6 mg/m3	Components	Туре	Value	
Cyclohexanone (CAS 108-94-1)         STEL         50 ppm           108-94-1)         TWA         20 ppm           Furan, Tetrahydro- (CAS 109-99-9)         TWA         50 ppm           Methyl ethyl ketone (CAS 78-93-3)         TWA         300 ppm           US. NIOSH: Pocket Guide to Chemical Hazards           Components         Type         Value           Acetone (CAS 67-64-1)         TWA         590 mg/m3 250 ppm           Cyclohexanone (CAS 108-94-1)         TWA         100 mg/m3 250 ppm           Furan, Tetrahydro- (CAS 109-99-9)         STEL         735 mg/m3 250 ppm           Furan, Tetrahydro- (CAS 109-99-9)         STEL         735 mg/m3 200 ppm           Methyl ethyl ketone (CAS 209 ppm         STEL 200 ppm         885 mg/m3 200 ppm           Methyl ethyl ketone (CAS 78-93-3)         TWA 200 ppm         300 ppm           Silica, amorphous, fumed         TWA 6 mg/m3         6 mg/m3	Acetone (CAS 67-64-1)	STEL	500 ppm	
108-94-1)       TWA       20 ppm         Furan, Tetrahydro- (CAS       STEL       100 ppm         109-99-9)       TWA       50 ppm         Methyl ethyl ketone (CAS       STEL       300 ppm         78-93-3)       TWA       200 ppm         US. NIOSH: Pocket Guide to Chemical Hazards         Components       Type       Value         Acetone (CAS 67-64-1)       TWA       590 mg/m3         Cyclohexanone (CAS       TWA       100 mg/m3         108-94-1)       25 ppm         Furan, Tetrahydro- (CAS       STEL       735 mg/m3         109-99-9)       250 ppm         TWA       590 mg/m3         200 ppm       Methyl ethyl ketone (CAS       STEL       885 mg/m3         78-93-3)       300 ppm         Methyl ethyl ketone (CAS       TWA       590 mg/m3         78-93-3)       300 ppm         Stilica, amorphous, fumed       TWA       6 mg/m3		TWA	250 ppm	
Furan, Tetrahydro- (CAS 109-99-9)  TWA 50 ppm  Methyl ethyl ketone (CAS 5TEL 300 ppm  TWA 200 ppm  US. NIOSH: Pocket Guide to Chemical Hazards  Components Type Value  Acetone (CAS 67-64-1)  TWA 590 mg/m3 250 ppm  Cyclohexanone (CAS TWA 100 mg/m3 108-94-1)  Furan, Tetrahydro- (CAS 5TEL 735 mg/m3 109-99-9)  TWA 590 mg/m3 250 ppm  Furan, Tetrahydro- (CAS 5TEL 735 mg/m3 109-99-9)  Methyl ethyl ketone (CAS 5TEL 885 mg/m3 78-93-3)  Methyl ethyl ketone (CAS 5TEL 885 mg/m3 78-93-3)  TWA 590 mg/m3 200 ppm		STEL	50 ppm	
TWA   50 ppm		TWA	20 ppm	
Methyl ethyl ketone (CAS 78-93-3)         STEL         300 ppm           VS. NIOSH: Pocket Guide to Chemical Hazards         Type         Value           Components         Type         Value           Acetone (CAS 67-64-1)         TWA         590 mg/m3           Cyclohexanone (CAS 108-94-1)         TWA         100 mg/m3           Furan, Tetrahydro- (CAS 109-99-9)         STEL         735 mg/m3           109-99-9)         250 ppm           TWA         590 mg/m3 200 ppm           Methyl ethyl ketone (CAS 78-93-3)         STEL         885 mg/m3           Nethyl ethyl ketone (CAS 78-93-3)         TWA         590 mg/m3 200 ppm           Silica, amorphous, fumed         TWA         6 mg/m3		STEL	100 ppm	
78-93-3)  TWA 200 ppm  US. NIOSH: Pocket Guide to Chemical Hazards  Components Type Value  Acetone (CAS 67-64-1) TWA 590 mg/m3 250 ppm  Cyclohexanone (CAS TWA 100 mg/m3 108-94-1) 25 ppm  Furan, Tetrahydro- (CAS STEL 735 mg/m3 109-99-9)  TWA 590 mg/m3 200 ppm  Methyl ethyl ketone (CAS STEL 885 mg/m3 78-93-3)  TWA 590 mg/m3 200 ppm  Silica, amorphous, fumed TWA 6 mg/m3		TWA	50 ppm	
TWA   200 ppm		STEL	300 ppm	
Components         Type         Value           Acetone (CAS 67-64-1)         TWA         590 mg/m3           Cyclohexanone (CAS 108-94-1)         TWA         100 mg/m3           Furan, Tetrahydro- (CAS 109-99-9)         STEL         735 mg/m3           TWA         590 mg/m3           200 ppm         200 ppm           Methyl ethyl ketone (CAS 78-93-3)         STEL         885 mg/m3           TWA         590 mg/m3           300 ppm         300 ppm           TWA         590 mg/m3           200 ppm         590 mg/m3           200 ppm         6 mg/m3		TWA	200 ppm	
Acetone (CAS 67-64-1)  Acetone (CAS 67-64-1)  TWA  590 mg/m3 250 ppm 100 mg/m3 108-94-1)  25 ppm  Furan, Tetrahydro- (CAS 109-99-9)  TWA  590 mg/m3 250 ppm 25 ppm  735 mg/m3 250 ppm  TWA 590 mg/m3 200 ppm  Methyl ethyl ketone (CAS 78-93-3)  TWA 590 mg/m3 200 ppm  TWA 590 mg/m3	US. NIOSH: Pocket Guide to Che	mical Hazards		
Acetone (CAS 67-64-1)  Acetone (CAS 67-64-1)  Cyclohexanone (CAS 108-94-1)  TWA 100 mg/m3  25 ppm  Furan, Tetrahydro- (CAS 109-99-9)  TWA 250 ppm  25 ppm  735 mg/m3  250 ppm  TWA 590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 78-93-3)  TWA 590 mg/m3  200 ppm  TWA 590 mg/m3	Components	Туре	Value	
Cyclohexanone (CAS   TWA   100 mg/m3   108-94-1)   25 ppm	Acetone (CAS 67-64-1)	TWA		
Cyclohexanone (CAS 108-94-1)       TWA       100 mg/m3         Furan, Tetrahydro- (CAS 109-99-9)       STEL       735 mg/m3         TWA       250 ppm         590 mg/m3       200 ppm         Methyl ethyl ketone (CAS 78-93-3)       STEL       885 mg/m3         TWA       590 mg/m3         300 ppm       300 ppm         TWA       590 mg/m3         200 ppm       590 mg/m3         200 ppm       6 mg/m3	,		<u> </u>	
Furan, Tetrahydro- (CAS 109-99-9)       STEL       735 mg/m3         109-99-9)       250 ppm         TWA       590 mg/m3         200 ppm       885 mg/m3         78-93-3)       300 ppm         TWA       590 mg/m3         200 ppm         Silica, amorphous, fumed       TWA       6 mg/m3		TWA	• •	
109-99-9)  TWA  590 ppm  590 mg/m3  200 ppm  Methyl ethyl ketone (CAS 78-93-3)  TWA  885 mg/m3  300 ppm  TWA  590 mg/m3  200 ppm  300 ppm  TWA  590 mg/m3  200 ppm  TWA  6 mg/m3			25 ppm	
TWA 590 mg/m3 200 ppm  Methyl ethyl ketone (CAS 78-93-3)  TWA 885 mg/m3  TWA 300 ppm  TWA 590 mg/m3 200 ppm  TWA 590 mg/m3 200 ppm  Silica, amorphous, fumed TWA 6 mg/m3		STEL	735 mg/m3	
Methyl ethyl ketone (CAS   STEL   885 mg/m3   885 mg			250 ppm	
Methyl ethyl ketone (CAS 78-93-3)       STEL       885 mg/m3         TWA       300 ppm         590 mg/m3       200 ppm         Silica, amorphous, fumed       TWA       6 mg/m3		TWA	590 mg/m3	
78-93-3) 300 ppm 300 ppm 590 mg/m3 200 ppm Silica, amorphous, fumed TWA 6 mg/m3			200 ppm	
300 ppm TWA 590 mg/m3 200 ppm Silica, amorphous, fumed TWA 6 mg/m3		STEL	885 mg/m3	
Silica, amorphous, fumed TWA 200 ppm  6 mg/m3			300 ppm	
Silica, amorphous, fumed TWA 6 mg/m3		TWA	590 mg/m3	
			200 ppm	
		TWA	6 mg/m3	

Sections 7 and 8 excerpted from: Oatey 935557 SDS US

## **Biological limit values**

#### **ACGIH Biological Exposure Indices**

Value	Determinant	Specimen	Sampling Time
25 mg/l	Acetone	Urine	*
80 mg/l	1,2-Cyclohexan ediol, with hydrolysis	Urine	*
8 mg/l	Cyclohexanol, with hydrolysis	Urine	*
2 mg/l	Tetrahydrofura n	Urine	*
2 mg/l	MEK	Urine	*
	25 mg/l 80 mg/l 8 mg/l 2 mg/l	25 mg/l Acetone 80 mg/l 1,2-Cyclohexan ediol, with hydrolysis 8 mg/l Cyclohexanol, with hydrolysis 2 mg/l Tetrahydrofura n	25 mg/l Acetone Urine 80 mg/l 1,2-Cyclohexan ediol, with hydrolysis 8 mg/l Cyclohexanol, with hydrolysis 2 mg/l Tetrahydrofura Urine

<sup>\* -</sup> For sampling details, please see the source document.

## **Exposure guidelines**

US - California OELs: Skin designation

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Cyclohexanone (CAS 108-94-1) Skin designation applies.

 $\ensuremath{\mathsf{US}}$  - Tennessee OELs: Skin designation

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Cyclohexanone (CAS 108-94-1)

Furan, Tetrahydro- (CAS 109-99-9)

Can be absorbed through the skin.

Can be absorbed through the skin.

**US. NIOSH: Pocket Guide to Chemical Hazards** 

Cyclohexanone (CAS 108-94-1) Can be absorbed through the skin.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Skin protection

Other Wear appropriate chemical resistant clothing.

limits (where applicable) or to an acceptable level (in countries where exposure limits have not

been established), an approved respirator must be worn.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing and protective equipment to remove contaminants.

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## 9. Physical and chemical properties

**Appearance** 

Physical state Liquid.

Form Translucent liquid.

Color Red.

Odor Solvent.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling 151 °F (66.11 °C)

range

Flash point 14.0 - 23.0 °F (-10.0 - -5.0 °C)

1.8

Evaporation rate 5.5 - 8
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Flammability limit - upper 11.8

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 145 mm Hg @ 20 C

Vapor density 2.5

Relative density 0.94 +/- 0.02

Solubility(ies)

Solubility (water) Negligible

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.Viscosity1500 - 3500 cP

Other information

Bulk density8.1 lb/galExplosive propertiesNot explosive.Oxidizing propertiesNot oxidizing.

VOC 470 g/l SQACMD Method 304

## 10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials Acids. Strong oxidizing agents. Ammonia. Amines. Isocyanates. Caustics.

Hazardous decomposition

products

No hazardous decomposition products are known.

## 11. Toxicological information

Information on likely routes of exposure

May be fatal if swallowed and enters airways. Headache. Nausea, vomiting. May cause irritation Inhalation

to the respiratory system. Vapors have a narcotic effect and may cause headache, fatigue,

dizziness and nausea. Prolonged inhalation may be harmful.

Causes skin irritation. Skin contact

Eve contact Causes serious eve irritation

Ingestion May be fatal if swallowed and enters airways. Harmful if swallowed. Droplets of the product

aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Vapors have a narcotic effect and may cause headache, fatique,

dizziness and nausea. Skin irritation. May cause redness and pain.

Information on toxicological effects

May be fatal if swallowed and enters airways. Narcotic effects. May cause respiratory irritation. Acute toxicity

Components Species **Test Results** 

Acetone (CAS 67-64-1)

Acute Dermal

LD50 Rabbit > 20 ml/kg

Inhalation

LC50 Rat 50 mg/l, 8 Hours

Oral

LD50 5800 mg/kg Rat

Cyclohexanone (CAS 108-94-1)

Acute

Dermai

LD50 Rabbit 948 mg/kg

Inhalation

LC50 Rat 8000 ppm, 4 hours

Oral

Skin corrosion/irritation

LD50 800 mg/kg Rat

Serious eye damage/eye

irritation

Causes serious eye irritation.

Causes skin irritation.

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization. Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

In 2012 USEPA Integrated Risk Information System (IRIS) reviewed a two species inhalation lifetime study on THF conducted by NTP (1998). Male rats developed renal tumors and female mice developed liver tumors while neither the female rats nor the male mice showed similar results. Because the carcinogenic mechanisms could not be identified clearly in either species for either tumor, the EPA determined that the male rat and female mouse findings are relevant to the assessment of carcinogenic potential in humans. Therefore, the IRIS review concludes that these data in aggregate indicate that there is "suggestive evidence of carcinogenic potential" following exposure to THF by all routes of exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cyclohexanone (CAS 108-94-1) 3 Not classifiable as to carcinogenicity to humans. Silica, amorphous, fumed (CAS 112945-52-5) 3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Specific target organ toxicity -

single exposure

Reproductive toxicity

Narcotic effects. May cause drowsiness and dizziness. Respiratory tract irritation.

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

**Chronic effects** Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

Section 11 excerpted from: Oatey 935557 SDS US

## 12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity** 

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species **Test Results** 

Acetone (CAS 67-64-1)

Aquatic

LC50 Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours Fish

Cyclohexanone (CAS 108-94-1)

Aquatic

Fish LC50 Fathead minnow (Pimephales promelas) 481 - 578 mg/l, 96 hours

No data is available on the degradability of this product. Persistence and degradability

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Acetone (CAS 67-64-1) -0.24Cyclohexanone (CAS 108-94-1) 0.81 Furan, Tetrahydro- (CAS 109-99-9) 0.46 Methyl ethyl ketone (CAS 78-93-3) 0.29

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation

potential.

#### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material

and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

## 14. Transport information

DOT

**UN** number UN1993

**UN** proper shipping name Flammable liquids, n.o.s. (Methyl ethyl ketone RQ = 43706 LBS, Acetone RQ = 58005 LBS)

Transport hazard class(es)

Class 3 Subsidiary risk Label(s) 3 Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IB2, T7, TP1, TP8, TP28 Special provisions

**Packaging exceptions** 150 202 Packaging non bulk Packaging bulk 242

ΙΑΤΑ

UN1993 **UN** number

UN proper shipping name Flammable liquid, n.o.s. (Methyl ethyl ketone, Acetone)

Transport hazard class(es)

Class 3 Subsidiary risk Ш Packing group **Environmental hazards** No **ERG Code** 3H

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

**IMDG** 

UN number UN1993

UN proper shipping name FLAMMABLE LIQUID, N.O.S. (Methyl ethyl ketone, Acetone)

Transport hazard class(es)

Class 3
Subsidiary risk Packing group II
Environmental hazards
Marine pollutant No.

EmS F-E, S-E

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

Not established.

## 15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

## TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

## CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1)

Cyclohexanone (CAS 108-94-1)

Furan, Tetrahydro- (CAS 109-99-9)

Methyl ethyl ketone (CAS 78-93-3)

LISTED

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

Not regulated.

## Other federal regulations

## Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

## Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Acetone (CAS 67-64-1) 6532 Methyl ethyl ketone (CAS 78-93-3) 6714

## Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1) 35 %WV Methyl ethyl ketone (CAS 78-93-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number** 

Acetone (CAS 67-64-1) 6532 Methyl ethyl ketone (CAS 78-93-3) 6714

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## **US** state regulations

#### US. Massachusetts RTK - Substance List

Acetone (CAS 67-64-1) Cyclohexanone (CAS 108-94-1) Furan, Tetrahydro- (CAS 109-99-9) Methyl ethyl ketone (CAS 78-93-3)

Silica, amorphous, fumed (CAS 112945-52-5)

## US. New Jersey Worker and Community Right-to-Know Act

Acetone (CAS 67-64-1) Cyclohexanone (CAS 108-94-1) Furan, Tetrahydro- (CAS 109-99-9) Methyl ethyl ketone (CAS 78-93-3)

## US. Pennsylvania Worker and Community Right-to-Know Law

Acetone (CAS 67-64-1) Cyclohexanone (CAS 108-94-1) Furan, Tetrahydro- (CAS 109-99-9) Methyl ethyl ketone (CAS 78-93-3)

Silica, amorphous, fumed (CAS 112945-52-5)

## **US. Rhode Island RTK**

Acetone (CAS 67-64-1) Cyclohexanone (CAS 108-94-1) Furan, Tetrahydro- (CAS 109-99-9) Methyl ethyl ketone (CAS 78-93-3)

## **US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

#### International Inventories

 Country(s) or region
 Inventory name
 On inventory (yes/no)\*

 Canada
 Domestic Substances List (DSL)
 Yes

 United States & Puerto Rico
 Toxic Substances Control Act (TSCA) Inventory
 Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s)

## 16. Other information, including date of preparation or last revision

Issue date 26-October-2016

 Revision date

 Version #
 01

 HMIS® ratings
 Health: 2

Flammability: 3 Physical hazard: 0

NFPA ratings



**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently

available. Oatey cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to

assume liability for loss, injury, damage or expense due to improper use.

TFP-600 Blazemaster CPVC Cement 935557 Version #: 01 Revision date: - Issue date: 26-October-2016 SDS US

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Sections 15 and 16 excerpted from: Oatey 935557 SDS US

