SAFETY DATA SHEET

Section 1. Chemical Product & Company Identification

TITAN INDUSTRIAL CHEMICALS, LLC

P.O. BOX 635 GROVER, MO. 63040 636-273-9033

Product Name: TITAN SEAL

Product Use: FLOOR COATING

Product Code: 46105

EMERGENCY NUMBER: 1-800-535-5053

Section 2. Hazards Identification

OSHA Defined Hazards:

Reproductive Toxicity Category 2

Label Elements:

Signal Word: WARNING

Hazard Statements: Suspected of damaging fertility or the unborn child.



Precautionary Statements (Prevention):

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Precautionary Statements (Response):

If exposed or concerned get medical advice/attention.

Precautionary Statements (Storage):

Store locked up.

Precautionary Statements (Disposal):

Dispose of contents/container to an approved waste disposal plant.

Section 3. Composition/Information on Ingredients

<u>Chemical Name</u>	CAS Number	% by Weight
Tributoxyethyl phosphate	78-51-3	1-5
Acrylic polymer	Proprietary	30-40
Diethylene glycol monomethyl ether	111-77-3	1-5
Dipropylene Glycol Monomethyl Ether (DPM)	34590-94-8	1-5
Alcohol ethoxylate	68439-46-3	<1

Due to Trade Secret, the exact percentage of composition has been stated as a range. The exact identities of other ingredients has also been withheld as Trade Secret. However, they do not contribute to the identified hazards of the product and will be divulged to proper authorities in an emergency.

Section 4. First Aid Measures

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes, lifting upper and lower lids. Get medical advice/attention.

Skin Contact: Wash with plenty of water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

Ingestion: Rinse mouth with water and drink plenty of water.

Most Important Symptoms/Effects, Acute & Delayed: Eye itching, stinging, redness, tearing. Skin redness, itching. May cause irritation to the mucous membranes and upper respiratory tract.

Indication of Immediate Medical Attention & Special Treatment Needed: Provide general supportive measures and treat symptomatically.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: Water fog. Foam. Dry chemical powder. Carbon dioxide.

Specific Hazards Arising From the Chemical: Non flammable

Special Protective Equipment and Precautions for Firefighters: As with any fire, use self contained breathing apparatus and full protective clothing.

Fire Fighting Equipment/Instructions: Move containers from area if you can do so without risk.

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

General Fire Hazards: No unusual fire or explosion hazards noted.

Product Code: 46105 Safety Data Sheet Product Name: TITAN SEAL

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment & Emergency Procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill. Keep out of low areas. Wear appropriate protective equipment and clothing during clean up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods & Materials for Containment & Cleaning Up: This product is miscible in water. Large spills: stop the flow of material, if this is without risk. Dike the spilled material, where possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small spills: wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spilled material to original container.

Environmental Precautions: Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Section 7. Handling and Storage

Precautions for Safe Handling: Do not get in eyes, on skin, or on clothing. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Do not handle until all safety precautions have been read and understood.

Conditions for Safe Storage, including any Incompatibilities: Store in original tightly closed container in a cool, dry, well ventilated place. Store away from any incompatible materials (see sec. 10).

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Guidelines:

Dipropylene Glycol Monomethyl Ether ACGIH TLV STEL 150ppm, TWA 100ppm S*

OSHA PEL TWA 100ppm, TWA 600mg/m3 (vacated), TWA 600mg/m3 (vacated), STEL 150ppm (vacated), STEL 900 mg/m3

(vacated) S*

S*

NIOSH IDLH: IDLH 600ppm, TWA 100ppm, TWA 600mg/m3, STEL

150ppm, STEL 900mg/m3

<u>Appropriate Engineering Controls:</u> Good general ventilation 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. It is recommended that users of this product perform a risk assessment to determine the appropriate PPE.

Individual Protection Measures, Personal Protective Equipment:

Eye/Face: Wear eye protection and face protection.

Skin/Body: Wear chemical resistant gloves and clothing.

Respiratory: No special protective equipment is needed under normal use conditions.

General Hygiene Considerations: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothes and

protective equipment to remove contaminants.

Section 9. Physical & Chemical Properties

Appearance: Milky-white liquid

Physical State : Liquid Color: Milky white pH: Not determined Odor: Chemical

Boiling Point: Not determined Odor Threshold: Not available

Vapor Pressure: Unknown Specific Gravity: 1.029
Melting Point/Freeze Point: Unknown Flash Point: >200 F.

Evaporation Rate: Not available Flammability (solid, gas): Non-flammable Upper Flammability Limit: Not available Lower Flammability Limit: Not available

Explosive Properties: Not available Vapor Density: Not available

Water Solubility: Soluble Auto-Ignition Temperature: Not available

Decomposition Temperature: Not available Viscosity: Water-like

Oxidizing Properties: Not determined. Other Solubilities: Not available

Section 10. Stability & Reactivity

Reactivity: Not reactive under normal conditions. Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur.

Conditions to Avoid: Do not mix with other chemicals. Avoid contact with incompatible materials.

Incompatibility: Strong oxidizing agents. Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: None known. However, irritating and/or noxious fumes and gases may

be emitted upon decomposition.

Section 11. Toxicological Information

INFORMATION ON LIKELY ROUTES OF EXPOSURE:

Inhalation: May cause irritation of the respiratory system. Prolonged inhalation may be harmful.

Ingestion: May cause respiratory tract irritation.

Skin Contact: May cause skin irritation.

Eye Contact: May cause serious eye irritation.

COMPONENT INFORMATION:

<u>Chemical Name</u>	Oral LD50	<u>Dermal LD50</u>	<u>Inhalation</u>
<u>LC50</u>			
Tributoxyethyl phosphate	3000mg/kg	>5000 mg/kg	>6.4mg/L
Diethylene glycol monomethyl ether	=4ml/kg(rat)	=2500uL/kg (rabbit)	(rat)
Dipropylene Glycol Monomethyl Ether (DPM)	5230mg/kg(rat)	9500mg/kg (rabbit)	4 hr
Alcohol ethoxylate	1378mg/kg(rat)	>2g/kg(rabbit)	

INFORMATION ON PHYSICAL, CHEMICAL, TOXICOLOGICAL EFFECTS:

Symptoms: See sec. 4 of this SDS for symptoms.

DELAYED & IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT TERM EXPOSURE & LONG

TERM EXPOSURE:

Carcinogenicity: Not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA

Respiratory Sensitization: Not a respiratory sensitizer.

Skin Sensitization: Not a skin sensitizer.

Germ Cell Mutagenicity: No data available to indicate product is mutagenic or genotoxic.

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity, Single exposure: Not classified Specific Target Organ Toxicity, repeated exposure: Not classified.

Aspiration Hazard: Not available. Chronic Effects: None noted.

Section 12. Ecological Information

Ecotoxicity: Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

<u>Chemical</u>	Algae/Aquatic Plants	<u>Fish</u>	<u>Crustacea</u>
Tributoxyethyl phosphate	N/A	LC50 10.4-12.0mg/l	N/A
		96 hr.	
Diethylene glycol mono	EC50:500mg/L:72 h	7500:96h Lepomis macro	500: 48h Daphnia
methyl ether	Desmodesmus	chirus mg/L LC50	magna mg/L EC50
	subspicatus	static 7500:96h Lepomis	
		macrochirus mg/L LC50	

Dipropylene glycol N/A 10000:96h Pimephales 1919: 48h monomethyl ether promelas mg/L LC50 Daphnia flow through magna mg/L

LC50

Persistance & Degradability: No data available.

Bioaccumulation: No data available

Mobility in Soil:

<u>Chemical Name</u> <u>Partition Coefficient</u>

Tributoxy phosphate 3.65-4.78

Diethylene glycol monomethyl ether -0.682

Diethylene glycol ethyl ether -0.08

Other adverse Effects: No other adverse effects expected.

Section 13. Disposal Considerations

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Hazardous waste Code: Not a hazardous waste.

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: Since empty containers may contain product residue, follow all label warnings even after container is emptied. Follow disposal directions.

Section 14. Transport Information

Regulatory Information	UN Number	Proper Shipping Name	Classes	PG*	Label
DOT Classification: Not Regulated					

NOTE: DOT Classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill Of Lading with your shipment.

PG*: Packing Group

Section 15. Regulatory Information

U.S. Federal Regulations:

SARA 313 toxic chemical notification and release reporting:
Diethylene glycol monomethyl ether
CAS# 111-77-3
Dipropylene glycol monomethyl ether (DPM)
CAS# 34590--94-8

US State Right to Know Regulations:

New Jersey: Diethylene glycol monomethyl ether, Dipropylene glycol monomethyl ether (DPM)

Massachusetts: Dipropylene glycol monomethyl ether (DPM), Diethylene glycol monomethyl ether

Pennsylvania: : Diethylene glycol monomethyl ether, Dipropylene glycol monomethyl ether (DPM)

Section 16. Other Information

NFPA: Not determined HMIS: Not determined

Issue Date: November 5, 2015

Revision Date: N/A Revision Note: N/A

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution.

Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

*Note: Hazard Determination System (HDS) ratings are on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on SDS's under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.