

#### SAFETY DATA SHEET / MATERIAL SAFETY DATA SHEET

Date of Preparation: February 27, 2015

#### Section 1: IDENTIFICATION

**Product Name:** Tytan Professional Subfloor High Yield Adhesive Pro

Synonyms: Not available. **Product Use:** Foam Adhesive. Restrictions on Use: Not available.

Manufacturer/Supplier: Selena USA, Inc.

> 486 Century Lane Holland, MI 49423

ChemTrec: 1-800-424-9300 **Emergency Phone:** 

**Date of Preparation of SDS:** February 27, 2015

#### Section 2: HAZARD(S) IDENTIFICATION

#### **GHS INFORMATION**

Classification: Flammable Aerosols, Category 2

Gases Under Pressure - Compressed Gas

Skin Irritation, Category 2 Eye Irritation, Category 2B

Sensitization - Respiratory, Category 1

Sensitization - Skin, Category 1

Toxic to Reproduction, Effects on or via Lactation

Specific Target Organ Toxicity (Single Exposure), Category 3 - Respiratory

Irritation

Specific Target Organ Toxicity (Repeated Exposure), Category 2

#### LABEL ELEMENTS

Hazard

Pictogram(s):









Signal Word: Danger

Hazard Flammable aerosol.

Statements: Contains gas under pressure; may explode if heated.

> Causes skin irritation. Causes eve irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction. May cause harm to breast-fed children.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

## **Precautionary Statements**



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**Prevention:** Obtain special instructions before use.

Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.

Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Do not breathe mist, vapors, or spray.

Avoid contact during pregnancy and while nursing.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves, protective clothing and eye protection.

Wear respiratory protection.

Response: If on skin: Wash with plenty of soap and water.

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.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center or doctor.

Take off contaminated clothing and wash it before reuse.

Storage: Store in a well-ventilated place. Keep container tightly closed.

Store locked up.
Protect from sunlight.

Do not expose to temperatures exceeding 50°C/ 122°F.

**Disposal:** Dispose of contents/container in accordance with applicable regional, national

and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: 8% of this product mixture consists of ingredient(s) of

unknown acute toxicity.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS					
Hazardous Ingredient(s) Isocyanic acid, polymethylenepolyphenylene ester	Common name / Synonyms Polymeric Methylene Diphenyl Diisocyanate (PMDI)	<b>CAS No.</b> 9016-87-9	<b>% wt./wt.</b> 30 - 60		
2-Propanol, 1-chloro-, 2,2',2"- phosphate	Tri-(2-chloroisopropyl)phosphate (TCPP)	13674-84-5	10 - 30		
Ethane, 1,1-difluoro-	1,1-Difluoroethane (R 152a)	75-37-6	10 - 30		



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Alkanes, C14-17, chloro	Chloroalkanes (chloroparafin)	85535-85-9	3 - 7
Methane, 1,1'-oxybis-	Dimethyl ether	115-10-6	3 - 7
Propane, 2-methyl-	Isobutane	75-28-5	1 - 5
Morpholine, 4,4'-(oxydi-2,1-	Dimorpholinodiethyl ether	6425-39-4	0.1 - 1
ethanediyl)bis-	•		

Exact percentage (concentration) of composition has been withheld as a trade secret.

#### **Section 4: FIRST-AID MEASURES**

#### Inhalation:

If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or doctor.

Acute and delayed symptoms and effects: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. At room temperature, MDI vapors are minimal due to low volatility. However, certain operations may generate vapor or mist concentrations sufficient to cause respiratory irritation and other adverse effects. Such operations include those in which the material is heated, sprayed or otherwise mechanically dispersed. Allergy-prone people who have been sensitized to isocyanates or even have not been previously exposed to isocyanates may experience symptoms at concentrations as low as 0.0014 ppm. Asthma sufferers or people who easily get contact dermatitis should therefore not be exposed to isocyanates.

## **Eye Contact:**

If in eyes: Rinse cautiously with 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.

Acute and delayed symptoms and effects: Causes eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. PMDI may cause severe watering, formation of solid particles in the eye fluid, glaucoma, photophobia (sensitivity to light), blepharospasm (uncontrollable winking), conjunctivitis (inflammation of the mucous membranes of the eye lids with possible discharge), keratitis (inflammation of the cornea) and damage the cornea (opacity or clouding).

## **Skin Contact:**

Remove the foam from skin using a cloth. Take off immediately all contaminated clothing. Remove uncured foam from skin using delicate solvent like acetone or mineral spirit (avoid contact with eyes). Hardened foam may be removed by persistent washing with soap and large quantities of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Acute and delayed symptoms and effects: May cause an allergic skin reaction. Causes skin irritation. Signs/symptoms may include localized



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redness, swelling, and itching. Prolonged skin contact may cause redness,

swelling, blistering and possible skin sensitization (dermatitis). MDI

compounds have a mild tanning action on the skin.

**Ingestion:** If swallowed: Call a poison center or doctor if you feel unwell. If vomiting

occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person.

Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset,

nausea, vomiting and diarrhea.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately

(show the label or SDS where possible).

**Note to Physicians:** Symptoms may not appear immediately.

#### Section 5: FIRE-FIGHTING MEASURES

#### FLAMMABILITY AND EXPLOSION INFORMATION

Flammable aerosol. Contains gas under pressure; may explode if heated. Containers may explode when heated. Ruptured cylinders may rocket.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

**Sensitivity to Static Discharge:** This material is sensitive to static discharge.

**MEANS OF EXTINCTION** 

Suitable Extinguishing Media: Dry chemical, CO2 or water spray. Move containers from fire

area if you can do it without risk.

Unsuitable Extinguishing Media: Not available.

**Products of Combustion:** Oxides of carbon. Oxides of nitrogen. Oxides of phosphorus.

Hydrogen chloride. Chlorine. Hydrogen cyanide. Isocyanate

vapours. Hydrogen fluoride.

**Protection of Firefighters:** Wear positive pressure self-contained breathing apparatus

(SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing

will only provide limited protection.

## **Section 6: ACCIDENTAL RELEASE MEASURES**

**Emergency Procedures:** As an immediate precautionary measure, isolate spill or leak area.

Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch or

walk through spilled material.

**Personal Precautions:** Use personal protection recommended in Section 8.



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Environmental Precautions: Prevent entry into waterways, sewers, basements or confined

areas.

Methods for Containment: Stop leak if you can do it without risk. Do not direct water at spill

or source of leak. Use water spray to reduce vapors or divert

vapor cloud drift.

Methods for Clean-Up: Remove from surfaces by scraping up excess material and

removing residual residue with cloth and solvent such as acetone or mineral spirit, paint thinner, etc. Hardened foam can only be removed physically or mechanically by scraping or buffing.

Other Information: See Section 13 for disposal considerations.

#### Section 7: HANDLING AND STORAGE

## Handling:

Do not swallow. Do not breathe mist, vapors, or spray. Avoid contact during pregnancy and while nursing. Pressurized container: Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, and hot surfaces. — No smoking. Do not spray on an open flame or other ignition source. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. See Section 8 for information on Personal Protective Equipment.

#### Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

#### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

# Exposure Guidelines Component

Polymeric Methylene Diphenyl Diisocyanate (PMDI) [CAS No. 9016-87-9]

**ACGIH:** 0.005 ppm (TWA); (1985), For Methylene bisphenyl isocyanate (MDI) **OSHA:** 0.02 ppm (C), 0.2 mg/m³ (C); For Methylene bisphenyl isocyanate (MDI)

Tri-(2-chloroisopropyl)phosphate (TCPP) [CAS No. 13674-84-5]

**ACGIH:** No TLV established. **OSHA:** No PEL established.

1,1-Difluoroethane (R 152a) [CAS No. 75-37-6]

**ACGIH:** No TLV established. **OSHA:** No PEL established.

Chloroalkanes (chloroparafin) [CAS No. 85535-85-9]



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ACGIH: No TLV established.
OSHA: No PEL established.
Dimethyl ether [CAS No. 115-10-6]
ACGIH: No TLV established.
OSHA: No PEL established.

Isobutane [CAS No. 75-28-5]

**ACGIH:** 1000 ppm (TWA); (2001) **OSHA:** No PEL established.

Dimorpholinodiethyl ether [CAS No. 6425-39-4]

**ACGIH:** No TLV established. **OSHA:** No PEL established.

**PEL:** Permissible Exposure Limit **TLV:** Threshold Limit Value **TWA:** Time-Weighted Average

C: Ceiling

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels

of dust, fume, vapour, gas, etc.) below recommended

exposure limits.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)



**Eye/Face Protection:** Wear safety glasses. Ensure that eyewash stations are

close to the workstation location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29

CFR 1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. Consult manufacturer specifications

for further information.

**Skin and Body Protection:** Wear protective clothing.

Respiratory Protection: Wear respiratory protection. If engineering controls and

ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, or self-contained breathing



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apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying

respirators.

General Hygiene Considerations: Handle according to established industrial hygiene and

safety practices.

#### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Rapidly curing foam dispensed by gaseous propellant from an

aerosol container.

Colour: Pale yellow.

Odour: Characteristic.

Odour Threshold: Not available.

Physical State: Liquid (Aerosol foam.)

pH: Not available.

**Melting Point / Freezing** 

Point:

Not available.

Initial Boiling Point:Not available.Boiling Range:Not available.Flash Point:< 0 °C (32 °F)</th>Evaporation Rate:Not available.Flammability (solid, gas):See Section 5.

Lower Flammability Limit: 1.8 % (Isobutane)

**Upper Flammability Limit:** 18 % (1,1-Difluoroethane (R 152a))

Vapor Pressure: Not available.

Vapor Density: Not available.

Relative Density: 1.08 (Water = 1)

**Solubilities:** Insoluble in water; reacts with water.

Partition Coefficient: n-

Octanol/Water:

Not available.

Auto-ignition Temperature: Product is not self-igniting.

**Decomposition** Not available.

Temperature:

Viscosity: Not available.

Percent Volatile, wt. %: Not available.



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VOC content, wt. %: Not available.

Density: Not available.

Coefficient of Water/Oil Not available.

**Distribution:** 

## **Section 10: STABILITY AND REACTIVITY**

**Reactivity:** Contact with incompatible materials. Sources of ignition. Exposure to

heat.

Chemical Stability: Stable under normal storage conditions.

**Possibility of Hazardous** 

Reactions:

None known.

Conditions to Avoid: Contact with incompatible materials. Sources of ignition. Exposure to

heat.

Incompatible Materials: Acids. Bases. Oxidizers. Alkali metals. Metals. Amines. Alcohols.

Hazardous Decomposition Products: Isocyanate vapours. Carbon dioxide.

## **Section 11: TOXICOLOGICAL INFORMATION**

### **EFFECTS OF ACUTE EXPOSURE**

**Product Toxicity** 

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity Component Polymeric Methylene Diphenyl Diisocyanate (PMDI)	<b>CAS No.</b> 9016-87-9	<b>LD</b> ₅₀ <b>oral</b> 49000 mg/kg (rat)	<b>LD</b> ₅₀ <b>dermal</b> > 9400 mg/kg (rabbit)	<b>LC</b> ₅₀ 490 mg/m³ (rat); 4H
Tri-(2-chloroisopropyl) phosphate (TCPP)	13674-84-5	1500 mg/kg (rat)	Not available.	Not available.
1,1-Difluoroethane (R 152a)	75-37-6	Not available.	Not available.	977000 mg/m³ (rat); 2H
Chloroalkanes (chloroparafin)	85535-85-9	Not available.	Not available.	Not available.
Dimethyl ether	115-10-6	Not available.	Not available.	308000 mg/m <sup>3</sup> (rat);
Isobutane	75-28-5	Not available.	Not available.	570000 ppm (rat); 15M
Dimorpholinodiethyl ether	6425-39-4	Not available.	Not available.	Not available.



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Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs.

Cardiovascular system. Nervous system.

Symptoms (including delayed and immediate effects)

**Inhalation:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May

cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation

may cause headache, dizziness, confusion, loss of appetite and/or loss of

consciousness. At room temperature, MDI vapors are minimal due to low volatility. However, certain operations may generate vapor or mist concentrations sufficient to cause respiratory irritation and other adverse effects. Such operations include those in which the material is heated, sprayed or otherwise mechanically dispersed. Allergy-prone people who have been sensitized to isocyanates or even have not

been previously exposed to isocyanates may experience symptoms at

concentrations as low as 0.0014 ppm. Asthma sufferers or people who easily get

contact dermatitis should therefore not be exposed to isocyanates.

**Eye:** Causes eye irritation. Signs/symptoms may include redness, swelling, pain, tearing,

and blurred or hazy vision. PMDI may cause severe watering, formation of solid

particles in the eye fluid, glaucoma, photophobia (sensitivity to light),

blepharospasm (uncontrollable winking), conjunctivitis (inflammation of the mucous membranes of the eye lids with possible discharge), keratitis (inflammation of the

cornea) and damage the cornea (opacity or clouding).

**Skin:** May cause an allergic skin reaction. Causes skin irritation. Signs/symptoms may

include localized redness, swelling, and itching. Prolonged skin contact may cause redness, swelling, blistering and possible skin sensitization (dermatitis). MDI

compounds have a mild tanning action on the skin.

Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain,

stomach upset, nausea, vomiting and diarrhea.

**Skin Sensitization:** Hazardous by OSHA/WHMIS criteria. May cause sensitisation

through skin contact.

**Respiratory Sensitization:** Hazardous by OSHA/WHMIS criteria. May cause sensitisation

through inhalation. Allergy-prone people who have been sensitized

to isocyanates or even have not been previously exposed to

isocyanates may experience symptoms at concentrations as low as 0.0014 ppm. Asthma sufferers or people who easily get contact

dermatitis should therefore not be exposed to isocyanates.

Medical Conditions
Aggravated By Exposure:

Not available.

**EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)** 



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**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs.

Cardiovascular system. Nervous system.

**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation.

Carcinogenicity: Product is not classified as a carcinogen. See Component

Carcinogenicity table below for information on individual components.

**Component Carcinogenicity** 

ComponentACGIHIARCNTPOSHAProp 65Polymeric Methylene DiphenylNot listed.Group 3Not listed.Not listed.Not listed.

Diisocyanate (PMDI)

Mutagenicity: Not available.

Reproductive Effects: May cause harm to breast-fed children. Avoid contact during

pregnancy and while nursing.

**Developmental Effects** 

**Teratogenicity:** Not available. **Embryotoxicity:** Not available.

Toxicologically Synergistic Materials: Not available.

# Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

### **Section 13: DISPOSAL CONSIDERATIONS**

**Disposal Instructions:** Disposal should be in accordance with applicable regional, national

and local laws and regulations. Local regulations may be more

stringent than regional or national requirements.

## **Section 14: TRANSPORT INFORMATION**

**U.S. Department of Transportation (DOT)** 

Proper Shipping Name: UN1950, AEROSOLS, 2.1

**Class:** 2.1

UN Number: UN1950

Packing Group: Not applicable.



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Label Code:

FLAMMABLE GAS 2

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: UN1950, AEROSOLS, 2.1

**Class**: 2.1

UN Number: UN1950

Packing Group: Not applicable.

Label Code:



### **Section 15: REGULATORY INFORMATION**

#### **Chemical Inventories**

## **US (TSCA)**

The components of this product are in compliance with the chemical notification requirements of TSCA.

#### Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

## **Federal Regulations**

#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification: Class A - Compressed Gas.

Class B5 - Flammable Aerosols. Class D2A - Reproductive toxicity. Class D2A - Respiratory sensitization.

Class D2B - Skin sensitization.

Class D2B - Skin irritant. Class D2B - Eye irritant.

**Hazard Symbols:** 



#### **United States**

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.



Not listed.

10000

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Not listed.

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SARA Title III Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112( r ) TQ (lbs.)
Polymeric Methylene Diphenyl Diisocyanate	Not listed.	Not listed.	Not listed.	313#	Not listed.	Not listed.
1,1- Difluoroethane (R 152a)	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Dimethyl ether	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000

Not listed.

Not listed.

## **State Regulations**

## Massachusetts

Isobutane

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Not listed.

Component	CAS No.	RTK List
Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	Listed.
1,1-Difluoroethane (R 152a)	75-37-6	Listed.
Dimethyl ether	115-10-6	Listed.
Isobutane	75-28-5	Listed.

### **New Jersey**

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	Listed.
1,1-Difluoroethane (R 152a)	75-37-6	SHHS
Dimethyl ether	115-10-6	SHHS
Isobutane	75-28-5	SHHS

**Note:** SHHS = Special Health Hazard Substance

## Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component
CAS No.
RTK List

1,1-Difluoroethane (R 152a)
75-37-6
Listed.

Dimethyl ether
115-10-6
Listed.

Isobutane
75-28-5
Listed.

### **Section 16: OTHER INFORMATION**



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## Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his own particular use.

Date of Preparation of SDS: February 5, 2014 SDS Expiry Date (Canada): February 4, 2017

Version: 1.1