

# Material Safety Data Sheet

Print Date 24-May-2011

Revision Date 24-May-2011

Revision Number 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Common name** SERIES 243 PART A  
**Product code** S243-0243A  
**Trade name** ULTRA-TREAD V  
**Product Class** POLYOL PAINT

**Manufacturer** Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372  
**Emergency telephone** 800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### WARNING!

HARMFUL OR FATAL IF SWALLOWED.  
HARMFUL IF INHALED.  
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.  
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.

#### Potential health effects

**Principle Routes of Exposure** Eye contact, Inhalation, Skin contact.

#### Acute effects

**Eyes** Moderately irritating to the eyes.  
**Skin** Irritating to skin.  
**Inhalation** Irritating to respiratory system.  
**Ingestion** May be harmful if swallowed.

#### Chronic effects

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions** Kidney disorders. Skin disorders. Respiratory disorders.

**Interactive effects** Use of alcoholic beverages may enhance toxic effects.

**Potential environmental effects** See Section 12 for additional Ecological Information

**Target Organ Effects** Eyes, Kidney, Respiratory system, Skin

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

BUTYL BENZYL PHTHALATE	85-68-7	10 - 30
VEGETABLE OIL MIST		5 - 10
SORBITAN MONOLAURATE	1338-39-2	5 - 10
ALKYL GLYCIDYL ETHER	68609-97-2	1 - 5
PINE OIL	8002-09-3	1 - 5

### 4. FIRST AID MEASURES

<b>Eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water.
<b>Ingestion:</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Inhalation:</b>	Move to fresh air. Oxygen or artificial respiration if needed.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	No information available
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical

**Hazardous decomposition products** Oxides of carbon, hydrocarbons. Oxides of nitrogen. Hydrogen cyanide.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

**Protective equipment and precautions for firefighters**

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. May cause heat and pressure build-up in closed containers.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.
<b>Other information</b>	Not applicable

### 7. HANDLING AND STORAGE

**Handling**

Close container after each use. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

**Storage**

Keep away from heat, sparks and flame. Use only in an area containing flame proof equipment. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

**Engineering measures**                      Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment**

**Skin protection**                              Lightweight protective clothing, Apron, Impervious gloves  
**Eye/face protection**                        Goggles. If splashes are likely to occur, wear face-shield.  
**Respiratory protection**                      **Use only with adequate ventilation.** Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use.

**General hygiene considerations**        Handle in accordance with good industrial hygiene and safety practice.  
 Avoid breathing dust created by cutting, sanding, or grinding.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Flash point</b>	Not applicable
<b>Boiling range</b>	100 - 100°C / 212.0 - 212.0°F
<b>Upper explosion limit</b>	No information available
<b>Lower explosion limit</b>	No information available
<b>Evaporation rate</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific Gravity</b>	1.01880 g/cm <sup>3</sup>
<b>Density</b>	8.47797 lbs/gal
<b>Volatile organic compounds (VOC) content</b>	.469 lbs/gal
<b>Volatile by weight</b>	32.0530 %
<b>Volatile by volume</b>	32.8402 %

## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to avoid</b>	Heat, flames and sparks. Reacts with air to form peroxides. Amines.
<b>Incompatible products</b>	Strong oxidizing agents. Acids. Amines.	<b>Possibility of hazardous reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity****Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
WATER	90 mL/kg ( Rat )		

## 11. TOXICOLOGICAL INFORMATION

BUTYL BENZYL PHTHALATE	2330 mg/kg ( Rat )	6700 mg/kg ( Rat )	6.7 mg/L ( Rat ) 4 h
SORBITAN MONOLAURATE	33600 mg/kg ( Rat )		
ALKYL GLYCIDYL ETHER	17100 mg/kg ( Rat )		
PINE OIL	3200 mg/kg ( Rat )	5 g/kg ( Rabbit )	

**Irritation** No information available  
**Corrosivity** No information available  
**Sensitization** No information available

### Chronic toxicity

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen

**Mutagenicity** No information available  
**Reproductive effects** No information available  
**Developmental effects** No information available  
**Teratogenicity** No information available  
**Target Organ Effects** Eyes, Kidney, Respiratory system, Skin.  
**Endocrine Disruptor Information** No information available

Component	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
BUTYL BENZYL PHTHALATE	Group III Chemical Group I Chemical	High Exposure Concern	

## 12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT

### Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
BUTYL BENZYL PHTHALATE	EC50 0.02 - 0.25 mg/L 96 h EC50 0.2 - 28.2 mg/L 72 h	LC50 1.0-10.0 mg/L <i>Lepomis macrochirus</i> 96 h LC50 1.0-10.0 mg/L <i>Oncorhynchus mykiss</i> 96 h LC50 1.39-3.88 mg/L <i>Pimephales promelas</i> 96 h LC50= 0.82 mg/L <i>Oncorhynchus mykiss</i> 96 h LC50> 0.78 mg/L <i>Pimephales promelas</i> 96 h		EC50 0.9 - 1.1 mg/L 48 h EC50 = 0.97 mg/L 48 h EC50 = 1.28 mg/L 48 h EC50 > 0.76 mg/L 48 h
SORBITAN MONOLAURATE		LC50= 75 mg/L <i>Salmo gairdneri</i> 96 h		
PINE OIL				EC50 17 - 28 mg/L 48 h

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods** Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

**Contaminated packaging** Empty containers should be taken for local recycling, recovery or waste disposal

## 14. TRANSPORT INFORMATION

**DOT** Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.

**Proper shipping name** PAINT, WATER BASE FREEZABLE  
**Marine Pollutant:** This product contains a chemical which is listed as a marine pollutant according to DOT.

## 15. REGULATORY INFORMATION

### International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not Comply
CHINA	Complies
ENCS	Does not Comply
KECL	Complies
PICCS	Complies
AICS	Complies

### United States of America Federal Regulations

#### SARA 313

#### SARA 311/312 Hazardous Categorization

Chronic Health Hazard	no
Acute Health Hazard	yes
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
BUTYL BENZYL PHTHALATE		X	X	

### CERCLA

### United States of America State Regulations

#### California Prop. 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
BUTYL BENZYL PHTHALATE	85-68-7	Developmental

### State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
BUTYL BENZYL PHTHALATE	X	X	X	X	
PINE OIL		X			

### Other international regulations

#### Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**WHMIS Classification**

D2B Toxic materials



Component	NPRI
BUTYL BENZYL PHTHALATE	Part 1, Group 1 Substance

**Legend**

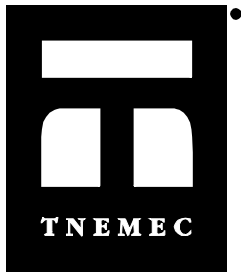
NPRI - National Pollutant Release Inventory

**16. OTHER INFORMATION****Revision Date** 24-May-2011**Revision Note** No information available**HMIS (Hazardous Material Information System)**      **Health 2**                      **Flammability 1**                      **Reactivity 1****Disclaimer**

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

**End of MSDS**



# Material Safety Data Sheet

Print Date 06-May-2011

Revision Date 06-May-2011

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Common name</b>	SERIES 243 PART B
<b>Product code</b>	S243-0243B
<b>Trade name</b>	ULTRA-TREAD V
<b>Product Class</b>	ISOCYANATE
<b>Manufacturer</b>	Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
<b>Emergency telephone</b>	800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### DANGER!

HARMFUL OR FATAL IF SWALLOWED.  
HARMFUL IF INHALED.  
MAY CAUSE LUNG INJURY.  
MAY CAUSE ALLERGIC RESPIRATORY REACTION; EFFECTS MAY BE PERMANENT.  
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.  
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.

#### Potential health effects

**Principle Routes of Exposure** Eye contact, Inhalation, Skin contact.

#### Acute effects

<b>Eyes</b>	Moderately irritating to the eyes. Risk of serious damage to eyes.
<b>Skin</b>	Irritating to skin. May cause sensitization by skin contact.
<b>Inhalation</b>	Irritating to respiratory system. May cause allergic respiratory reaction.
<b>Ingestion</b>	Harmful if swallowed.

#### Chronic effects

Avoid repeated exposure.

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions** Respiratory disorders.

**Interactive effects** Use of alcoholic beverages may enhance toxic effects.

**Potential environmental effects** See Section 12 for additional Ecological Information

**Target Organ Effects** Eyes, Respiratory system

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER	101-68-8	30 - 60
POLYMERIC MDI	9016-87-9	30 - 60
DIPHENYLMETHANE DIISOCYANATE (MDI) POLYMER	26447-40-5	10 - 30

### 4. FIRST AID MEASURES

<b>Eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water.
<b>Ingestion:</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Inhalation:</b>	Move to fresh air. Oxygen or artificial respiration if needed.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	No information available
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical

**Hazardous decomposition products** Oxides of carbon, hydrocarbons. Oxides of nitrogen. Hydrogen cyanide.

#### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

#### Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. May cause heat and pressure build-up in closed containers.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.
<b>Other information</b>	Not applicable

### 7. HANDLING AND STORAGE

#### Handling

**Use only with adequate ventilation.** Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.



**Storage**

Keep containers tightly closed in a cool, well-ventilated place. Close container after each use.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER	: 0.005 ppm TWA	: 0.02 ppm Ceiling; 0.2 mg/m <sup>3</sup> Ceiling	TWA: 0.005 ppm TWAEV; 0.051 mg/m <sup>3</sup> TWAEV	TWA: 0.005 ppm TWA (designated substance regulation, listed under Isocyanates, organic compounds); 0.005 ppm TWA (applies to workplaces to which the designated substance regulation does not apply) CEV: 0.02 ppm Ceiling (designated substances regulation)	: 0.02 ppm TWA; 0.2 mg/m <sup>3</sup> TWA; 0.005 ppm TWA (as Methylene bisphenyl isocyanate); 0.051 mg/m <sup>3</sup> TWA (as Methylene bisphenyl isocyanate)

**Engineering measures**

Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment****Skin protection**

Lightweight protective clothing, Apron, Impervious gloves

**Eye/face protection**

Safety glasses with side-shields

**Respiratory protection**

INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS OR PRIOR REACTION TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOR OR SPRAY MIST. Do not breathe vapor or spray mist. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits. An airline respirator (TC 19C NIOSH/MSHA) is recommended. A vapor-particulate respirator (TC 23C NIOSH/MSHA) may be appropriate where air monitoring demonstrates vapors are less than ten times the applicable exposure limits and the isocyanate concentration is less than its applicable exposure limit. The use of an air-supplied respirator is mandatory whenever the airborne concentration of isocyanate monomer is unknown.

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Flash point	Not applicable
Boiling range	No information available
Upper explosion limit	No information available
Lower explosion limit	No information available
Evaporation rate	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	1.22094 g/cm <sup>3</sup>
Density	10.16002 lbs/gal
Volatile organic compounds (VOC) content	.000 lbs/gal
Volatile by weight	.0000 %
Volatile by volume	.0000 %

## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to avoid</b>	Amines. Heat, flames and sparks. Heat, flames and sparks.
<b>Incompatible products</b>	Water, alcohols, amines, strong bases, metal components, surface active materials.	<b>Possibility of hazardous reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER	9200 mg/kg ( Rat )		
POLYMERIC MDI	49 g/kg ( Rat )	9400 mg/kg ( Rabbit )	490 mg/m <sup>3</sup> ( Rat ) 4 h
DIPHENYLMETHANE DIISOCYANATE (MDI) POLYMER	7400 mg/kg ( Rat )	6200 mg/kg ( Rabbit )	0.369 mg/L ( Rat ) 4 h

<b>Irritation</b>	No information available
<b>Corrosivity</b>	No information available
<b>Sensitization</b>	No information available

### Chronic toxicity

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen

<b>Mutagenicity</b>	No information available
<b>Reproductive effects</b>	No information available
<b>Developmental effects</b>	No information available
<b>Teratogenicity</b>	No information available
<b>Target Organ Effects</b>	Eyes, Respiratory system.
<b>Endocrine Disruptor Information</b>	No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
DIPHENYLMETHANE DIISOCYANATE (MDI) POLYMER	EC50 = 3230 mg/L 96 h			EC50 > 1000 mg/L 24 h

## 13. DISPOSAL CONSIDERATIONS

<b>Waste disposal methods</b>	Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.
<b>Contaminated packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal

## 14. TRANSPORT INFORMATION

**DOT** Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.

**Proper shipping name** PAINT IN OIL

## 15. REGULATORY INFORMATION

International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>CHINA</b>	Complies
<b>ENCS</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

**Component**  
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER

United States of America Federal RegulationsSARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER	101-68-8	30 - 60	1.0 % de minimis concentration (includes only those chemicals that are specifically listed, Chemical Category N120) 1.0 % de minimis concentration (listed under Chemical Category N120, Diisocyanates)
POLYMERIC MDI	9016-87-9	30 - 60	1.0 % de minimis concentration (listed under Chemical Category N120, Diisocyanates)
DIPHENYLMETHANE DIISOCYANATE (MDI) POLYMER	26447-40-5	10 - 30	1.0

SARA 311/312 Hazardous Categorization

<b>Chronic Health Hazard</b>	yes
<b>Acute Health Hazard</b>	yes
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

CERCLAUnited States of America State Regulations**California Prop. 65**

This product contains the following Proposition 65 chemicals:

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER	X	X	X	X	X
POLYMERIC MDI		X			
DIPHENYLMETHANE DIISOCYANATE (MDI) POLYMER		X			

**Other international regulations**

**Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**WHMIS Classification**

D2A Very toxic materials



Component	NPRI
DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER	Part 1, Group 1 Substance

**Legend**

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Revision Date 06-May-2011

Revision Note No information available

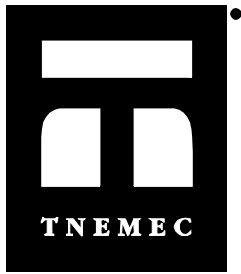
HMIS (Hazardous Material Information System)      Health 3\*      Flammability 2      Reactivity 1

**Disclaimer**

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

**End of MSDS**



# Material Safety Data Sheet

Print Date 06-May-2011

Revision Date 06-May-2011

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Common name</b>	SERIES 243 PART C
<b>Product code</b>	S243-0243C
<b>Trade name</b>	ULTRA-TREAD V
<b>Product Class</b>	AGGREGATE
<b>Manufacturer</b>	Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
<b>Emergency telephone</b>	800-535-5053 (INFOTRAC) - TNEMEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### WARNING!

CAUSES SKIN AND EYE BURNS.  
HARMFUL BY INHALATION.  
MAY CAUSE EYE INJURY.

#### Potential health effects

#### Principle Routes of Exposure

Eye contact, Inhalation, Skin contact.

#### Acute effects

##### Eyes

Risk of serious damage to eyes. Causes burns. Exposure of sufficient duration to wet cement, or to dry cement on moist areas of the body, can cause serious, potentially irreversible tissue (skin, eye, respiratory tract) damage due to chemical (caustic) burns, including third degree burns. May cause eye injury.

##### Skin

Contact causes severe skin irritation and possible burns. Exposure of sufficient duration to wet cement, or to dry cement on moist areas of the body, can cause serious, potentially irreversible tissue (skin, eye, respiratory tract) damage due to chemical (caustic) burns, including third degree burns.

##### Inhalation

Irritating to respiratory system. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Exposure of sufficient duration to wet cement, or to dry cement on moist areas of the body, can cause serious, potentially irreversible tissue (skin, eye, respiratory tract) damage due to chemical (caustic) burns, including third degree burns.

##### Ingestion

May be harmful if swallowed.

#### Chronic effects

Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure).

See Section 11 for additional Toxicological information.

#### Aggravated Medical Conditions

Skin disorders. Respiratory disorders.

#### Interactive effects

No information available.

#### Potential environmental effects

See Section 12 for additional Ecological Information

#### Target Organ Effects

Eyes, Respiratory system, Skin, Lungs

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	30 - 60
ALUMINUM SILICATE (TOTAL DUST)	1302-93-8	10 - 30
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	10 - 30
CALCIUM HYDROXIDE	1305-62-0	5 - 10
CALCIUM SILICATES AND ALUMINATES	65997-15-1	5 - 10
AMORPHOUS SILICA	7631-86-9	1 - 5

### 4. FIRST AID MEASURES

<b>Eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water.
<b>Ingestion:</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Inhalation:</b>	Move to fresh air. Oxygen or artificial respiration if needed.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	No information available.
<b>Suitable extinguishing media</b>	Foam, carbon dioxide, and dry chemical.
<b>Hazardous decomposition products</b>	No information available

#### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

#### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Use personal protective equipment.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	Shovel or sweep up.
<b>Other information</b>	Not applicable

### 7. HANDLING AND STORAGE

#### Handling

Close container after each use. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Tightly fitting safety goggles. Wear protective gloves/clothing. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

**Storage**

Keep away from heat, sparks and flame. Keep container tightly closed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
CRYSTALLINE SILICA (QUARTZ)	: 0.025 mg/m <sup>3</sup> TWA (respirable fraction)	: 0.1 mg/m <sup>3</sup> TWA (respirable dust)	TWA: 0.1 mg/m <sup>3</sup> TWAEV (respirable dust)	TWA: 0.10 mg/m <sup>3</sup> TWA (designated substance regulation, respirable)	: 0.1 mg/m <sup>3</sup> TWA (respirable fraction)
ALUMINUM SILICATE (TOTAL DUST)	TWA: 1 mg/m <sup>3</sup>			TWA: 1 mg/m <sup>3</sup> TWA (respirable)	
CRYSTALLINE SILICA (QUARTZ)	: 0.025 mg/m <sup>3</sup> TWA (respirable fraction)	: 0.1 mg/m <sup>3</sup> TWA (respirable dust)	TWA: 0.1 mg/m <sup>3</sup> TWAEV (respirable dust)	TWA: 0.10 mg/m <sup>3</sup> TWA (designated substance regulation, respirable)	: 0.1 mg/m <sup>3</sup> TWA (respirable fraction)
CALCIUM HYDROXIDE	: 5 mg/m <sup>3</sup> TWA	: 5 mg/m <sup>3</sup> TWA (not in effect as a result of reconsideration) : 15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)	TWA: 5 mg/m <sup>3</sup> TWAEV	TWA: 5 mg/m <sup>3</sup> TWA	: 5 mg/m <sup>3</sup> TWA
CALCIUM SILICATES AND ALUMINATES	: 1 mg/m <sup>3</sup> TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	: 10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction) : 15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)	TWA: 10 mg/m <sup>3</sup> TWAEV (total dust, containing no asbestos and less than 1% crystalline silica); 5 mg/m <sup>3</sup> TWAEV (respirable dust, containing no asbestos and less than 1% crystalline silica)	TWA: 10 mg/m <sup>3</sup> TWA (containing no Asbestos and <1% Crystalline silica, total dust)	: 10 mg/m <sup>3</sup> TWA : 20 mg/m <sup>3</sup> STEL

**Engineering measures**

Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment****Skin protection**

Lightweight protective clothing, Apron, Impervious gloves

**Eye/face protection**

Tightly fitting safety goggles

**Respiratory protection**

**Use only with adequate ventilation.** Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

**General hygiene considerations**

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Flash point**

Not applicable

**Boiling range**

No information available

**Upper explosion limit**

No information available

**Lower explosion limit**

No information available

**Evaporation rate**

No information available

**Vapor pressure**

No information available

**Vapor density**

No information available

**Specific Gravity**

2.64039 g/cm<sup>3</sup>

**Density**

21.97203 lbs/gal

**Volatile organic compounds (VOC) content**

.000 lbs/gal

**Volatile by weight**

.0000 %

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Volatile by volume** .0000 %

## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to avoid</b>	Heat, flames and sparks
<b>Incompatible products</b>	Acids. Strong oxidizing agents.	<b>Possibility of hazardous reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg ( Rat )		
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg ( Rat )		
CALCIUM HYDROXIDE	7340 mg/kg ( Rat )		
AMORPHOUS SILICA	5000 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	2.2 mg/L ( Rat ) 1 h

<b>Irritation</b>	No information available
<b>Corrosivity</b>	No information available
<b>Sensitization</b>	No information available

### Chronic toxicity

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	ACGIH	IARC	NTP	OSHA	Mexico
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	X	
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	X	

<b>Mutagenicity</b>	No information available
<b>Reproductive effects</b>	No information available
<b>Developmental effects</b>	No information available
<b>Teratogenicity</b>	No information available
<b>Target Organ Effects</b>	Eyes, Respiratory system, Skin, Lungs.
<b>Endocrine Disruptor Information</b>	No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
CALCIUM HYDROXIDE		LC50= 160 mg/L Gambusia affinis 96 h		
AMORPHOUS SILICA	EC50 = 440 mg/L 72 h	LC50= 5000 mg/L Brachydanio rerio 96 h		EC50 = 7600 mg/L 48 h



### 13. DISPOSAL CONSIDERATIONS

<b>Waste disposal methods</b>	Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.
<b>Contaminated packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal

### 14. TRANSPORT INFORMATION

<b>DOT</b>	Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.
<b>Proper shipping name</b>	SILCA,N.O.I.-20-P.C.F.,GREATER (ITEM 176370,Sub 3)

### 15. REGULATORY INFORMATION

#### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>CHINA</b>	Complies
<b>ENCS</b>	Does not Comply
<b>KECL</b>	Complies
<b>PICCS</b>	Does not Comply
<b>AICS</b>	Complies

#### United States of America Federal Regulations

##### SARA 313

##### SARA 311/312 Hazardous Categorization

<b>Chronic Health Hazard</b>	yes
<b>Acute Health Hazard</b>	yes
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

#### CERCLA

#### United States of America State Regulations

##### **California Prop. 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	Carcinogen
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	Carcinogen

#### **State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X

CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
CALCIUM HYDROXIDE	X	X	X		X
CALCIUM SILICATES AND ALUMINATES	X	X	X		X
AMORPHOUS SILICA	X		X		

**Other international regulations****Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**WHMIS Classification**

D2A Very toxic materials

**Legend**

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION
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Revision Date 06-May-2011

Revision Note No information available

HMIS (Hazardous Material Information System) Health 1\* Flammability 0 Reactivity 0

**Disclaimer**

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

**End of MSDS**