

# Material Safety Data Sheet

Print Date 03-Sep-2011

Revision Date 01-Sep-2011

Revision Number 3

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Common name</b>	SERIES 237 PART A
<b>Product code</b>	S237-11WHA
<b>Trade name</b>	POWER-TREAD TINT WHITE
<b>Product Class</b>	EPOXY PAINT
<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!

CAUSES SKIN AND EYE BURNS.  
HARMFUL OR FATAL IF SWALLOWED.  
HARMFUL IF INHALED.  
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.  
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

<b>Eyes</b>	Causes burns.
<b>Skin</b>	Causes burns. May cause sensitization by skin contact.
<b>Inhalation</b>	Irritating to respiratory system.
<b>Ingestion</b>	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** No information available

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

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

**Target Organ Effects** Lungs, Respiratory system

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
EPOXY RESIN (LER)	25085-99-8	60 - 100
BENZYL ALCOHOL	100-51-6	5 - 10
NONYLPHENOL	84852-15-3	5 - 10
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	5 - 10
CARBAMIDE ACID ESTER RESIN		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
<b>Hazardous decomposition products</b>	Oxides of carbon, hydrocarbons. Aldehydes. Ketones. Silicon. Oxides of nitrogen. Hydrogen cyanide. Oxides of sulphur.
<b>Specific hazards arising from the chemical</b>	Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.
<b>Protective equipment and precautions for firefighters</b>	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

Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
TITANIUM DIOXIDE (TOTAL DUST)	: 10 mg/m <sup>3</sup> TWA	: 10 mg/m <sup>3</sup> TWA (total dust) : 15 mg/m <sup>3</sup> TWA (total dust)	TWA: 10 mg/m <sup>3</sup> TWAEV (total dust, containing no Asbestos and <1% Crystalline silica)	TWA: 10 mg/m <sup>3</sup> TWA (total dust)	: 10 mg/m <sup>3</sup> TWA (as Ti) : 20 mg/m <sup>3</sup> STEL (as Ti)

### Engineering measures

Ensure adequate ventilation, especially in confined areas

### Personal Protective Equipment

#### Skin protection

Lightweight protective clothing, Apron, Impervious gloves

#### Eye/face protection

If splashes are likely to occur, wear 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.

#### 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.0.0
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	1.18361 g/cm <sup>3</sup>
Density	9.84938 lbs/gal
Volatile organic compounds (VOC) content	.314 lbs/gal
Volatile by weight	3.1890 %
Volatile by volume	4.2061 %

## 10. STABILITY AND REACTIVITY

## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to avoid</b>	Heat, flames and sparks. Amines. Reacts with air to form peroxides. Contact with water liberates toxic gas (methanol).
<b>Incompatible products</b>	Strong oxidizing agents. Bases. 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
BENZYL ALCOHOL	1230 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	8.8 mg/L ( Rat ) 4 h
NONYLPHENOL	580 mg/kg ( Rat )	2031 mg/kg ( Rabbit )	
TITANIUM DIOXIDE (TOTAL DUST)	10000 mg/kg ( Rat )		

<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
TITANIUM DIOXIDE (TOTAL DUST)		Group 2B		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>	Lungs, Respiratory system.
<b>Endocrine Disruptor Information</b>	No information available

Component	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
EPOXY RESIN (LER)	Group III Chemical		
NONYLPHENOL	Group II Chemical	Medium Exposure Concern	

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
BENZYL ALCOHOL	EC50 = 35 mg/L 3 h	LC50= 460 mg/L Pimephales promelas 96 h LC50= 10 mg/L Lepomis macrochirus 96 h	EC50 = 63.7 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 71.4 mg/L 30 min EC50 = 50 mg/L 5 min	EC50 = 23 mg/L 48 h

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
NONYLPHENOL	EC50 0.36 - 0.48 mg/L 96 h EC50 0.16 - 0.72 mg/L 72 h EC50 = 1.3 mg/L 72 h	LC50= 0.135 mg/L Pimephales promelas 96 h LC50= 0.1351 mg/L Lepomis macrochirus 96 h		EC50 = 0.14 mg/L 48 h EC50 0.17 - 0.21 mg/L 48 h EC50 0.0874 - 0.124 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 IN OIL

### 15. REGULATORY INFORMATION

#### International Inventories

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

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

#### CERCLA

#### United 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

BENZYL ALCOHOL	X		X		
NONYLPHENOL	X		X		
TITANIUM DIOXIDE (TOTAL DUST)	X	X	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**

D2B Toxic materials  
E Corrosive material



Component	NPRI
NONYLPHENOL	Part 1, Group 1 Substance

**Legend**

NPRI - National Pollutant Release Inventory

**16. OTHER INFORMATION**

Revision Date 01-Sep-2011

Revision Note No information available

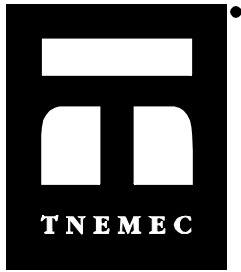
HMIS (Hazardous Material Information System)      Health 3      Flammability 1      Reactivity 1

**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 28-Sep-2011

Revision Date 28-Sep-2011

Revision Number 6

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Common name</b>	SERIES 237 PART B
<b>Product code</b>	S237-0237B
<b>Trade name</b>	POWER-TREAD CONVERTER
<b>Product Class</b>	EPOXY PAINT
<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!

CAUSES SKIN AND EYE BURNS.  
HARMFUL OR FATAL IF SWALLOWED.  
HARMFUL IF INHALED.  
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.  
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

<b>Eyes</b>	Causes burns.
<b>Skin</b>	Causes burns. May cause sensitization by skin contact.
<b>Inhalation</b>	Irritating to respiratory system.
<b>Ingestion</b>	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** No information available

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

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

**Target Organ Effects** Lungs, Respiratory system

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
BENZYL ALCOHOL	100-51-6	30 - 60
MODIFIED CYCLOALIPHATIC POLYAMINE		30 - 60
POLYOXYPROPYLENETRIAMINE	39423-51-3	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
<b>Hazardous decomposition products</b>	Oxides of carbon, hydrocarbons. Aldehydes. Ketones. Silicon. Oxides of nitrogen. Hydrogen cyanide. Oxides of sulphur. Ammonia. Nitric acid, nitrosamine. Phenolics.

#### 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**

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**

If splashes are likely to occur, wear 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.

**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>	No information available
<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>	1.02293 g/cm <sup>3</sup>
<b>Density</b>	8.51235 lbs/gal
<b>Volatile organic compounds (VOC) content</b>	.306 lbs/gal
<b>Volatile by weight</b>	3.5890 %
<b>Volatile by volume</b>	3.5119 %

## 10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to avoid</b>	Heat, flames and sparks. Amines. Reacts with air to form peroxides. Contact with water liberates toxic gas (methanol). Epoxy constituents.
<b>Incompatible products</b>	Strong oxidizing agents. Bases. Acids. Amines. Hypochlorites. Nitrous acid and other nitrosating agents. Peroxides.	<b>Possibility of hazardous reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

## 11. TOXICOLOGICAL INFORMATION

### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
BENZYL ALCOHOL	1230 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	8.8 mg/L ( Rat ) 4 h
MODIFIED CYCLOALIPHATIC POLYAMINE	1000 mg/kg ( Rat )		

**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** Lungs, Respiratory system.  
**Endocrine Disruptor Information** No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
BENZYL ALCOHOL	EC50 = 35 mg/L 3 h	LC50= 460 mg/L Pimephales promelas 96 h LC50= 10 mg/L Lepomis macrochirus 96 h	EC50 = 63.7 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 71.4 mg/L 30 min EC50 = 50 mg/L 5 min	EC50 = 23 mg/L 48 h
MODIFIED CYCLOALIPHATIC POLYAMINE		LC50 46 - 100 mg/L Leuciscus idus 96 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 IN OIL

## 15. REGULATORY INFORMATION

### International Inventories

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

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

#### SARA 313

#### SARA 311/312 Hazardous Categorization

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

#### CERCLA

#### United 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
BENZYL ALCOHOL	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

D2B Toxic materials  
 E Corrosive material



##### Legend

NPRI - National Pollutant Release Inventory

## 16. OTHER INFORMATION

Revision Date

28-Sep-2011

