

#### Section 1 - Product and Company Identification

**Trade Name:** ProtoCoat 1253 Hardener (All Versions)

**Product Code:** ProtoCoat 1253 WH2A Hardener

**Company:**

Wolverine Coatings Corporation  
5969 Highway 221  
Roebuck, SC 29376  
+1 (864) 587-3144

**Emergency Contact:**

ChemTel 24 Hr. US Emergency Number:  
+1 (800) 255-3924  
ChemTel 24 Hr. Worldwide Emergency Number:  
+1 (813) 248-0585

**Product Use:** Coatings

**Not recommended for:** None Identified

#### Section 2 - Hazards Identification

**GHS Ratings:**

Flammable Liquid	3	Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)
Skin Corrosive	2	Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3 < 4.0$ or persistent inflammation
Eye Corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Respiratory sensitizer	1	Respiratory sensitizer
Organ Toxin Single Exposure	1	Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies, Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidan
Organ Toxin Repeated Exposure	1	Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidanc

**GHS Hazards**

H226	Flammable liquid and vapour
H315	Causes skin irritation
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure

**GHS Precautions**

P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P280	Wear protective gloves/protective clothing/eye protection/face protection
P285	In case of inadequate ventilation wear respiratory protection

P314	Get Medical advice/attention if you feel unwell
P321	Specific treatment (see label)
P362	Take off contaminated clothing and wash before reuse
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P307+P311	IF exposed: Call a POISON CENTER or doctor/physician
P332+P313	If skin irritation occurs: Get medical advice/attention
P337+P313	Get medical advice/attention
P342+P311	Call a POISON CENTER or doctor/physician
P370+P378	In case of fire: Use carbon dioxide, alcohol-resistant foam, dry chemical, dry sand, or water fog for extinction
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container in accordance with all local, regional, national, and international regulations.

**Signal Word:** Danger



### Section 3 - Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Titanium Dioxide	13463-67-7	20.00% - 30.00%
Quartz	14808-60-7	20.00% - 30.00%
Xylene	1330-20-7	10.00% - 20.00%
Tetraethylenepentamine	112-57-2	0.10% - 1.00%

### Section 4 - First Aid Measures

**Inhalation:** If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

**Eye Contact:** Immediately flush eyes for at least fifteen minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. If eye irritation persists: Get medical advice/attention.

**Skin contact:** Immediately remove contaminated clothing and shoes. Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Get immediate medical attention.

### Section 5 - Fire Fighting Measures

**Flash Point:** 25 C (77 F)

LEL: 1.00

UEL: 7.00

**Extinguishing Media:** Use carbon dioxide, foam, dry chemical, dry sand, water fog, or limestone powder

extinguishing systems.

**Unusual Fire and Explosion Hazards:** None

**Hazardous combustion products:** Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See section 10 (Stability and Reactivity) for additional information.

**Special Fire Fighting Procedures:** Firefighters should be equipped with self-contained breathing apparatus.

**Fire Equipment:** No Data

## Section 6 - Accidental Release Measures

**Spill And Leak Procedures:** Avoid all personal contact. Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Spills should be contained, solidified, and placed in suitable containers for disposal.

## Section 7 - Handling and Storage

**Handling Precautions:** Use good laboratory/workplace procedures. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Discard shoes contaminated with this product.

**Storage Requirements:** Keep away from heat, sparks, and open flames. Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use.

## Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS #	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Titanium Dioxide 13463-67-7	TWA: 15 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	Not Established
Quartz 14808-60-7	TWA 30 mg/m <sup>3</sup> / %SiO <sub>2</sub> +2 total dust TWA: 10 mg/m <sup>3</sup> /%SiO <sub>2</sub> +2 respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	Not Established
Xylene 1330-20-7	Not Established	TWA: 100 ppm	Not Established
Tetraethylenepentamine 112-57-2	Not Established	Not Established	Not Established

**Ventilation:** Good general mechanical ventilation and local exhaust is recommended.

**Hygiene:** Eye wash must be easily accessible. Wear protective clothing as necessary to prevent contact. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Gloves must be inspected regularly and prior to each use. Replace if necessary.

**Personal Protective Equipment:** Wear impervious protective gloves. Wear OSHA, NIOSH approved organic vapor respirator if ventilation is inadequate. Wear appropriate protective eyewear such as splash-proof, chemical resistant safety goggles.

**Contaminated Gear:** Take off all contaminated clothing immediately. Wash contaminated clothing before reuse.

## Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

<b>Appearance:</b> Liquid	<b>Odor:</b> Not available
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<b>Vapor Pressure:</b> 18.0 mm Hg	<b>Odor Threshold:</b> Not available
<b>Vapor Density:</b> Not available	<b>pH:</b> Not available
<b>Density (g/cm3):</b> 1.42	<b>Melting Point:</b> Not available
<b>Freezing Point:</b> Not available	<b>Solubility:</b> Not available
<b>Boiling Range:</b> Not available	<b>Flash Point:</b> 25 C, 77 F
<b>Evaporation Rate:</b> Not available	<b>Flammability:</b> Not available
<b>Explosive Limits:</b> Not available	<b>Partition Coefficient (n-octanol/water):</b> Not available
<b>Autoignition Temperature:</b> Not available	<b>Decomposition Temperature:</b> Not available
<b>Viscosity:</b> Not available	<b>Grams VOC (less water):</b> Not available

## Section 10 - Stability and Reactivity

### Stability:

STABLE

### Components of this mixture are incompatible with the following materials:

Strong Acids  
Strong Oxidizers

### This mixture is likely to exhibit the following combustion products:

No Data

Hazardous polymerization will not occur.

## Section 11 - Toxicological Information

### Mixture Toxicity:

Inhalation Toxicity LC50: 54mg/L

### Component Toxicity:

13463-67-7 Titanium Dioxide  
Inhalation LC50: 7 mg/kg (Rat)

1330-20-7 Xylene  
Oral LD50: 4,300 mg/kg (rat) Dermal LD50: 1,700 mg/kg (rabbit) Inhalation LC50: 5,000 ppr

112-57-2 Tetraethylenepentamine  
Oral LD50: 3,990 mg/kg (rat)

### Routes of Entry:

Inhalation Skin Contact Eye Contact Ingestion

### Exposure to this material may affect the following organs:

Lungs Respiratory System

The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing):

<b>CAS Number</b>	<b>Description</b>	<b>% Weight</b>	<b>Carcinogen Rating</b>
14808-60-7	Quartz	20 to 30%	Quartz: If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

## Section 12 - Ecological Information

### Component Ecotoxicity:

Titanium Dioxide	LC50 >1000 mg/l fish 96h; EC50 >1000 mg/l water flea 48h; EC50 >100 mg/l algae 72h
Quartz	LC50 >10,000 mg/l fish 72h;
Xylene	LC50 2 mg/l fish 96h; EC50 75.49 mg/l water flea 24h; EC50 72 mg/l algae 14d
Tetraethylenepentamine	LC50 420 mg/l fish 96h; EC50 24 mg/l water flea 48h

## Section 13 - Disposal Considerations

**Waste disposal Methods:** Dispose in accordance with Federal, State and Local regulations.

## Section 14 - Transport Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Paint	1263	III	3
IATA	No Data			
IMDG	No Data			

## Section 15 - Regulatory Information

### Additional regulatory listings, where applicable:

#### State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

Quartz 14808-60-7

Titanium Dioxide 13463-67-7

#### Materials not included on the Canada DSL inventory:

- None

**Commonwealth of Massachusetts "Right to Know":** This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

Tetraethylenepentamine 112-57-2

Xylene 1330-20-7

Quartz 14808-60-7

Titanium Dioxide 13463-67-7

**NJ "Right to Know":** This product contains the following toxic or hazardous substances which appear on the New Jersey Substance List:

Tetraethylenepentamine 112-57-2

Xylene 1330-20-7

Quartz 14808-60-7

Titanium Dioxide 13463-67-7

**Pennsylvania "Right to Know":** This product contains the following toxic or hazardous substances which appear on the Pennsylvania Substance List:

Tetraethylenepentamine 112-57-2

Xylene 1330-20-7

Quartz 14808-60-7

Titanium Dioxide 13463-67-7

**EPA SARA Title III Section 313 ( 40 CFR 372) components above 'de minimum' level:**

Xylene 1330-20-7

**Toxic Substances Control Act (TSCA):** All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

**Country**

**Regulation**

**All Components Listed**

**EU Risk Phrases**

**Safety Phrase**

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

EPA SARA Title III Section 313 ( 40 CFR 372) compnenets above 'de minimum' level:

**Section 16 - Other Information**

For further information, please contact the Product Safety director. The information and recommendations contained herein are, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals 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 that exist. Final determination of suitability of the chemical is the sole responsibility of the user. Users of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. No representations or warranties, either expressed or implied of merchantability, fitness for a particular purpose, or any other nature, are made hereunder with respect to the information contained herein, or to the chemical to which the user refers.

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