



Material Safety Data Sheet

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Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Common name	SERIES 1029
Product code	1029-11WH
Trade name	ENDURATONE WHITE
Product Class	ACRYLIC EMULSION 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 IF INHALED.
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

Potential health effects

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

Acute effects

Eyes Irritating to eyes.

Skin Irritating to skin.

Inhalation Irritating to respiratory system. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.

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. Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure). Contains ethylene glycol monobutyl ether which may cause blood damage based on animal data.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Gastrointestinal tract. Respiratory disorders.

Interactive effects No information available

Potential environmental effects See Section 12 for additional Ecological Information

Target Organ Effects Central Vascular System (CVS), Gastrointestinal tract, Eyes, Lungs, Respiratory system

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Hazardous Components

Component	CAS-No	Weight %
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	10 - 30
TALC (RESPIRABLE DUST)	14807-96-6	1 - 5
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	1 - 5
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE	25265-77-4	1 - 5
DIBUTYL PHTHALATE	84-74-2	1 - 5
ALUMINUM OXIDES	1344-28-1	0.1 - 1
ETHYLENE GLYCOL MONOBUTYL ETHER (SKIN)	111-76-2	0.1 - 1

4. FIRST AID MEASURES

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

5. FIRE-FIGHTING MEASURES

Flammable properties	No information available.
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO ₂) - Foam - Dry chemical
Hazardous decomposition products	Oxides of carbon, hydrocarbons. Oxides of nitrogen. Ammonia. formaldehyde.
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

Personal precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
Methods for cleaning up	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.
Other information	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 ³ TWA	: 10 mg/m ³ TWA (total dust) : 15 mg/m ³ TWA (total dust)	TWA: 10 mg/m ³ TWAEV (total dust, containing no asbestos and less than 1% crystalline silica)	TWA: 10 mg/m ³ TWA (total dust)	: 10 mg/m ³ TWA (as Ti) : 20 mg/m ³ STEL (as Ti)
TALC (RESPIRABLE DUST)	: 2 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	: 2 mg/m ³ TWA (<1% Crystalline silica, containing no Asbestos, respirable dust)	TWA: 3 mg/m ³ TWAEV (respirable dust)	TWA: 2 mg/m ³ TWA (containing no Asbestos and <1% Crystalline silica, respirable)	: 2 mg/m ³ TWA (respirable fraction)
CRYSTALLINE SILICA (QUARTZ)	: 0.025 mg/m ³ TWA (respirable fraction)	: 0.1 mg/m ³ TWA (respirable dust)	TWA: 0.1 mg/m ³ TWAEV (respirable dust)	TWA: 0.10 mg/m ³ TWA (designated substance regulation, respirable)	: 0.1 mg/m ³ TWA (respirable fraction)
DIBUTYL PHTHALATE	: 5 mg/m ³ TWA	: 5 mg/m ³ TWA	TWA: 5 mg/m ³ TWAEV	TWA: 5 mg/m ³ TWA	: 5 mg/m ³ TWA : 10 mg/m ³ STEL
ALUMINUM OXIDES	TWA: 1 mg/m ³	: 10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction) : 15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	TWA: 10 mg/m ³ TWAEV (total dust, containing no asbestos and less than 1% crystalline silica, as Al)	TWA: 10 mg/m ³	: 10 mg/m ³ TWA
ETHYLENE GLYCOL MONOBUTYL ETHER (SKIN)	: 20 ppm TWA	: 25 ppm TWA; 120 mg/m ³ TWA Skin : 50 ppm TWA; 240 mg/m ³ TWA	TWA: 20 ppm TWAEV; 97 mg/m ³ TWAEV	TWA: 20 ppm TWA	: 26 ppm TWA; 120 mg/m ³ TWA : 75 ppm STEL; 360 mg/m ³ STEL

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

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

100 - 260°C / 212.0 - 500.0°F

Upper explosion limit

No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Lower explosion limit	No information available
Evaporation rate	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	1.26199 g/cm ³
Density	10.50168 lbs/gal
Volatile organic compounds (VOC) content	.785 lbs/gal
Volatile by weight	47.3020 %
Volatile by volume	59.9551 %

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
WATER	90 mL/kg (Rat)		
TITANIUM DIOXIDE (TOTAL DUST)	10000 mg/kg (Rat)		
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg (Rat)		
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE	3200 mg/kg (Rat)	15200 mg/kg (Rat)	
DIBUTYL PHTHALATE	6300 mg/kg (Rat)	2000 mg/kg (Rabbit)	15.68 mg/L (Rat) 4 h
ALUMINUM OXIDES	5000 mg/kg (Rat)		
ETHYLENE GLYCOL MONOBUTYL ETHER (SKIN)	470 mg/kg (Rat)	2270 mg/kg (Rat) 220 mg/kg (Rabbit)	2.21 mg/L (Rat) 4 h 450 ppm (Rat) 4 h

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

Component	ACGIH	IARC	NTP	OSHA	Mexico
TITANIUM DIOXIDE (TOTAL DUST)		Group 2B		X	
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	X	
ETHYLENE GLYCOL MONOBUTYL ETHER (SKIN)	A3				

Mutagenicity	No information available
Reproductive effects	No information available
Developmental effects	No information available
Teratogenicity	No information available
Target Organ Effects	Central Vascular System (CVS), Gastrointestinal tract, Eyes, Lungs, Respiratory system.

Endocrine Disruptor Information No information available

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
TALC (RESPIRABLE DUST)		LC50> 100 g/L Brachydanio rerio 96 h		
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE	EC50 = 18.4 mg/L 72 h	LC50= 30 mg/L Pimephales promelas 96 h		LC50 > 95 mg/L 96 h
DIBUTYL PHTHALATE	EC50 = 1.2 mg/L 72 h EC50 = 0.4 mg/L 96 h	LC50 0.31-5.45 mg/L Pimephales promelas 96 h LC50 0.42-1.28 mg/L Lepomis macrochirus 96 h LC50 0.71-1.2 mg/L Pimephales promelas 96 h LC50 1.24-5.3 mg/L Oncorhynchus mykiss 96 h LC50 1.38-1.74 mg/L Lepomis macrochirus 96 h LC50> 1.24 mg/L Oncorhynchus mykiss 96 h	EC50 = 10.9 mg/L 5 min EC50 = 11.1 mg/L 15 min EC50 = 10.9 mg/L 30 min EC50 = 2.2 mg/L 24 h	EC50 = 2.99 mg/L 48 h EC50 = 3.4 mg/L 48 h
ETHYLENE GLYCOL MONOBUTYL ETHER (SKIN)		LC50= 1490 mg/L Lepomis macrochirus 96 h LC50= 2950 mg/L Lepomis macrochirus 96 h		EC50 1698 - 1940 mg/L 24 h EC50 > 1000 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

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	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):

Component

DIBUTYL PHTHALATE
ETHYLENE GLYCOL MONOBUTYL ETHER (SKIN)

United States of America Federal Regulations

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
DIBUTYL PHTHALATE	84-74-2	1 - 5	1.0 % de minimis concentration
ALUMINUM OXIDES	1344-28-1	0.1 - 1	1.0 % de minimis concentration (fibrous forms)
ETHYLENE GLYCOL MONOBUTYL ETHER (SKIN)	111-76-2	0.1 - 1	1.0

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

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
DIBUTYL PHTHALATE	10 lb RQ	X	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
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	Carcinogen
DIBUTYL PHTHALATE	84-74-2	Developmental Female Reproductive Male Reproductive

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
TITANIUM DIOXIDE (TOTAL DUST)	X	X	X		X
TALC (RESPIRABLE DUST)	X	X	X		X
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
DIBUTYL PHTHALATE	X	X	X	X	X
ALUMINUM OXIDES	X	X	X		X
ETHYLENE GLYCOL MONOBUTYL ETHER (SKIN)	X	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



Component	NPRI
DIBUTYL PHTHALATE	Part 1, Group 1 Substance
ALUMINUM OXIDES	Part 1, Group 1 Substance (fibrous form)
ETHYLENE GLYCOL MONOBUTYL ETHER (SKIN)	Part 1, Group 1 Substance; Part 5 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 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