



Material Safety Data Sheet

Print Date 17-May-2011

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Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Common name SERIES 1028
Product code 1028-11WH
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.

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.
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 Gastrointestinal tract. Respiratory disorders.

Interactive effects No information available

Potential environmental effects See Section 12 for additional Ecological Information

Target Organ Effects Gastrointestinal tract, Eyes, Lungs, Respiratory system

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Component	CAS-No	Weight %
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	10 - 30

3. COMPOSITION/INFORMATION ON INGREDIENTS

2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE	25265-77-4	1 - 5
DIBUTYL PHTHALATE	84-74-2	1 - 5
DIPROPYLENE GLYCOL BUTYL ETHER	29911-28-2	1 - 5
ALUMINUM OXIDES	1344-28-1	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)
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

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

Lower explosion limit

No information available

Evaporation rate

No information available

Vapor pressure

No information available

Vapor density

No information available

Specific Gravity

1.22068 g/cm³

Density

10.15789 lbs/gal

Volatile organic compounds (VOC) content

.787 lbs/gal

Volatile by weight

49.3690 %

Volatile by volume

60.5036 %

10. STABILITY AND REACTIVITY

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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)		
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
DIPROPYLENE GLYCOL BUTYL ETHER	1620 µL/kg (Rat)	5860 µL/kg (Rabbit)	42.1 ppm (Rat) 4 h 2.04 mg/L (Rat) 4 h
ALUMINUM OXIDES	5000 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

Component	ACGIH	IARC	NTP	OSHA	Mexico
TITANIUM DIOXIDE (TOTAL DUST)		Group 2B		X	

Mutagenicity	No information available
Reproductive effects	No information available
Developmental effects	No information available
Teratogenicity	No information available
Target Organ Effects	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
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

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
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
DIPROPYLENE GLYCOL BUTYL ETHER		LC50= 841 mg/L Poecilia reticulata 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, WATER BASE FREEZABLE

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	Complies

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

Component
DIBUTYL PHTHALATE

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)

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
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
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
DIBUTYL PHTHALATE	X	X	X	X	X
ALUMINUM OXIDES	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)

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Revision Date

17-May-2011

