



Safety Data Sheet

Issue Date 21-Aug-2018

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Revision Number 6

1. IDENTIFICATION

Product identifier

Product Code 1028-00WH
Product Name ENDURATONE TNEMEC WHITE

Other means of identification

Common Name SERIES 1028
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.
Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 816-474-3400
Distributor Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203, Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2B
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes eye irritation
May cause cancer
May damage fertility or the unborn child
Causes damage to organs
Causes damage to organs through prolonged or repeated exposure

**Appearance** opaque**Physical state** liquid**Odor** Slight aromatic**Precautionary Statements****Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not breathe dust/fume/gas/mist/vapors/spray
 Do not eat, drink or smoke when using this product

Response

IF exposed: Call a POISON CENTER or doctor/physician
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention

Storage

Store locked up
 Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

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.

Other information

Harmful to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity

0.00220615 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	10 - <30%
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE	25265-77-4	1 - <10%
DIBUTYL PHTHALATE	84-74-2	1 - <10%
ALUMINUM OXIDES	1344-28-1	1 - <10%
AMORPHOUS SILICA	7631-86-9	0.1 - <1%
AMMONIUM HYDROXIDE	1336-21-6	0.1 - <1%

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures**General advice**

If symptoms persist, call a physician.

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.
Inhalation	Remove to fresh air. Oxygen or artificial respiration if needed.
Ingestion	IF SWALLOWED. Rinse mouth. Do not induce vomiting without medical advice.
Self-protection of the first aider	Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

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

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Oxides of nitrogen. Formaldehyde. Ammonia.

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, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

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.

7. HANDLING AND STORAGE

Precautions for safe handling**Handling**

Close container after each use. Avoid contact with eyes, skin 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.

Conditions for safe storage, including any incompatibilities**Storage**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products

Bases. Acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 15 mg/m ³	5000 mg/m ³
DIBUTYL PHTHALATE 84-74-2	TWA: 5 mg/m ³	TWA: 5 mg/m ³	4000 mg/m ³
ALUMINUM OXIDES 1344-28-1	TWA: 1 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 15 mg/m ³	
AMORPHOUS SILICA 7631-86-9	-	TWA: 6 mg/m ³	3000 mg/m ³

NIOSH IDLH: *Immediately Dangerous to Life or Health*

Appropriate engineering controls**Engineering measures**

Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Use chemical resistant splash type goggles. If splashes are likely to occur, wear face-shield.

Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA 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

Information on basic physical and chemical properties

Physical state	liquid	Odor	Slight aromatic
Appearance	opaque	Odor threshold	No information available
Color	No information available		
Property	Values	Remarks	
pH		No data available	
Melting point / freezing point	No data available	No data available	
Boiling point / boiling range	100 °C / 212.0 °F		
Flash point	110 °C / 230.0 °F		
Evaporation rate		Pensky Martens - Closed Cup	
Flammability (solid, gas)	No data available	No data available	
Flammability Limit in Air		No information available	
Upper flammability limit	N/A	No data available	
Lower flammability limit	.5		
Vapor pressure		No data available	
Vapor density		No data available	
Specific gravity	1.21777	g/cm3	
Water solubility	Insoluble in cold water		
Solubility in other solvents		No data available	
Partition coefficient: n-octanol/water		No data available	
Autoignition temperature	No data available	No data available	
Decomposition temperature		No data available	
Kinematic viscosity		No data available	
Dynamic viscosity	1100 centipoises	approx	
<u>Other Information</u>			
Density	10.15622 lbs/gal		
Volatile organic compounds (VOC) content	0.75188 lbs/gal		
Total volatiles weight percent	49.26 %		
Total volatiles volume percent	60.31 %		
Bulk density	No information available		

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Bases, Acids, Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Ammonia. Formaldehyde. Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact	Causes serious eye irritation.
Skin contact	Irritating to skin. May cause sensitization by skin contact.
Ingestion	Harmful if swallowed.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	> 10000 mg/kg (Rat)	-	-
2,2,4-TRIMETHYL-1,3-PENTANEDI OL MONOISOBUTYRATE 25265-77-4	= 3200 mg/kg (Rat)	> 15200 mg/kg (Rat)	> 3.55 mg/L (Rat) 6 h
DIBUTYL PHTHALATE 84-74-2	= 7499 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	>= 15.68 mg/L (Rat) 4 h
ALUMINIUM OXIDES 1344-28-1	> 5000 mg/kg (Rat)	-	-
AMORPHOUS SILICA 7631-86-9	= 7900 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h
AMMONIUM HYDROXIDE 1336-21-6	= 350 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders. Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation May cause irritation.
Eye damage/irritation Irritating to eyes.
Chronic Toxicity Substances known to impair fertility. Substances known to be mutagenic to man. Skin sensitizer.
Sensitization May cause sensitization of susceptible persons.
Mutagenicity May cause genetic defects.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7		Group 2B	-	X
AMORPHOUS SILICA 7631-86-9		Group 1 Group 3	Known	

Reproductive effects May damage fertility or the unborn child.
STOT - single exposure Eyes, Skin, Central Nervous System (CNS)
STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure
Target organ effects Gastrointestinal tract, Eyes, Lungs, respiratory system, Skin.
Aspiration hazard No information available.

Acute Toxicity 0.00220615 % of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

28.78767 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
2,2,4-TRIMETHYL-1,3-PENTANEDI OL MONOISOBUTYRATE 25265-77-4	18.4: 72 h Pseudokirchneriella subcapitata mg/L EC50	30: 96 h Pimephales promelas mg/L LC50	95: 96 h Daphnia magna mg/L LC50
DIBUTYL PHTHALATE 84-74-2	0.4: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 1.2:	0.71 - 1.2: 96 h Pimephales promelas mg/L LC50 flow-through	2.99: 48 h Daphnia magna mg/L EC50 Static 3.4: 48 h Daphnia

	72 h <i>Desmodemus subspicatus</i> mg/L EC50	1.24: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 1.38 - 1.74: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 1.24 - 5.3: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 0.31 - 5.45: 96 h <i>Pimephales promelas</i> mg/L LC50 static 0.42 - 1.28: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	magna mg/L EC50
AMORPHOUS SILICA 7631-86-9	440: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	5000: 96 h <i>Brachydanio rerio</i> mg/L LC50 static	7600: 48 h <i>Ceriodaphnia dubia</i> mg/L EC50
AMMONIUM HYDROXIDE 1336-21-6		8.2: 96 h <i>Pimephales promelas</i> mg/L LC50	0.66: 48 h <i>Daphnia pulex</i> mg/L EC50 0.66: 48 h water flea mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Chemical name	log Pow
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE 25265-77-4	3.47
DIBUTYL PHTHALATE 84-74-2	5.38

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****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 to an approved waste handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
DIBUTYL PHTHALATE 84-74-2	U069	Included in waste stream: F039		U069
XYLENE 1330-20-7		Included in waste stream: F039		U239

Chemical name	CAWAST
AMMONIUM HYDROXIDE 1336-21-6	Toxic Corrosive

14. TRANSPORT INFORMATION**DOT****Proper Shipping Name**

Paint related material water base freezable

Additional information

Call TNE MEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does Not Comply
ENCS	Does Not Comply
IECSC	Complies
KECL	Does Not Comply
PICCS	Does Not Comply
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

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

Chemical name	HAPS Data
DIBUTYL PHTHALATE	

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values
DIBUTYL PHTHALATE - 84-74-2	1.0
ALUMINUM OXIDES - 1344-28-1	1.0
AMMONIUM HYDROXIDE - 1336-21-6	1.0

SARA 311/312 Hazardous

Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
DIBUTYL PHTHALATE 84-74-2	10 lb	X	X	X
AMMONIUM HYDROXIDE 1336-21-6	1000 lb			X

Chemical name	Hazardous Substances RQs	CERCLA EHS RQs	RQ
DIBUTYL PHTHALATE 84-74-2	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
AMMONIUM HYDROXIDE 1336-21-6	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

California Prop. 65

WARNING: This product can expose you to the following chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical name	California Prop. 65
TITANIUM DIOXIDE (TOTAL DUST) - 13463-67-7	Carcinogen
DIBUTYL PHTHALATE - 84-74-2	Developmental Female Reproductive Male Reproductive
AMORPHOUS SILICA - 7631-86-9	Carcinogen

ETHYLENE GLYCOL - 107-21-1	Developmental
PETROLEUM SOLVENT (NAPHTHA) - 64742-95-6	Developmental
IRON OXIDE FUME - 1309-37-1	*
ETHANOL - 64-17-5	Carcinogen Developmental
TITANIUM DIOXIDE (TOTAL DUST) - 13463-67-7	Carcinogen
DIETHANOLAMINE - 111-42-2	Carcinogen

California SCAQMD Rule 443
 Contains Photochemically Reactive Solvent

State Right-to-Know

Chemical name	New Jersey	Massachusetts	Pennsylvania
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	X	X	X
DIBUTYL PHTHALATE 84-74-2	X	X	X
ALUMINUM OXIDES 1344-28-1	X	X	X
AMORPHOUS SILICA 7631-86-9		X	X
AMMONIUM HYDROXIDE 1336-21-6	X	X	X

16. OTHER INFORMATION

NFPA	Health 3	Flammability 0	Instability 1	Physical hazard *
HMIS (Hazardous Material Information System)	Health 3*	Flammability 0	Reactivity 1	

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 4 5 7 10 8 9 11 14

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 SDS