Safety Data Sheet

Issue Date 28-Jul-2015 **Revision Date** 01-Jul-2015 **Revision Number** 4

1. IDENTIFICATION

Product identifier
Product Code 1029-00WH
Product Name ENDURATONE TNEMEC WHITE

Other means of identification
Common Name SERIES 1029

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

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
Skin sensitization	Category 1B
Germ cell mutagenicity	Category 1A
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 an allergic skin reaction
May cause genetic defects
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

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
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
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
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Storage
Store locked up
Keep away from children

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Other information
Harmful to aquatic life with long lasting effects
Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure).
Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs
SEE SAFETY DATA SHEET
Acute Toxicity 13.60934 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	10 - 30%
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	1 - 10%
TALC (RESPIRABLE DUST)	14807-96-6	1 - 10%
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%
DIPROPYLENE GLYCOL BUTYL ETHER	29911-28-2	1 - 10%
ZIRCONIUM OXIDE	1314-23-4	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 symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

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
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment. Avoid contact with eyes, skin and clothing. Ensure adequate ventilation. 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 Wear personal protective equipment. Avoid contact with eyes, skin and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Do not breathe vapours or spray mist. Do not ingest. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products Acids. Bases. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines .

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	TWA: 10 mg/m³	TWA: 10 mg/m³ TWA: 15 mg/m³	5000 mg/m³
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	TWA: 0.025 mg/m³	TWA: 0.1 mg/m³	50 mg/m³
TALC (RESPIRABLE DUST) 14807-96-6	TWA: 2 mg/m³	TWA: 2 mg/m³	1000 mg/m³
DIBUTYL PHTHALATE 84-74-2	TWA: 5 mg/m³	TWA: 5 mg/m³	4000 mg/m³
ALUMINUM OXIDES 1344-28-1	TWA: 1 mg/m³	TWA: 10 mg/m³ TWA: 5 mg/m³ TWA: 15 mg/m³	
ZIRCONIUM OXIDE 1314-23-4	TWA: 5 mg/m³	-	25 mg/m³

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. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.
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		
Appearance	opaque	**Odor**	Slight
Color	No information available	**Odor threshold**	No information available

Property	**Values**	**Remarks**
pH		No data available
Melting point / freezing point		No data available
Boiling point / boiling range	100 °C / 212.0 °F	
Flash point	110 °C / 230.0 °F	Pensky Martens - Closed Cup
Evaporation rate		No data available
Flammability (solid, gas)		Not applicable
Flammability Limit in Air		No data available
Upper flammability limit	N/A	
Lower flammability limit	.5	
Vapor pressure		No data available
Vapor density		No data available
Specific gravity	1.26881	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
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity	1200 centipoises	approx

Other Information

Density	10.55838 lbs/gal
Volatile organic compounds (VOC) content	.670 lbs/gal
Total volatiles weight percent	47.2190 %
Total volatiles volume percent	60.0591 %

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
Acids, Bases, 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. Oxides of nitrogen. Carbon oxides. Hydrocarbons. Ammonia. Formaldehyde.

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.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	> 10000 mg/kg (Rat)		
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	= 500 mg/kg (Rat)		
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE 25265-77-4	= 3200 mg/kg (Rat)	> 15200 mg/kg (Rat)	
DIBUTYL PHTHALATE 84-74-2	= 6300 mg/kg (Rat)	> 20 mL/kg (Rabbit)	> 15.68 mg/L (Rat) 4 h
ALUMINUM OXIDES 1344-28-1	> 5000 mg/kg (Rat)		
DIPROPYLENE GLYCOL BUTYL ETHER 29911-28-2	= 1620 µL/kg (Rat)	= 5860 µL/kg (Rabbit)	= 42.1 ppm (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders.

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

Chronic Toxicity 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. May cause cancer. Skin sensitizer. Substances known to impair fertility. Substances known to be mutagenic to man.

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.

Component	ACGIH	IARC	NTP	OSHA
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7		Group 2B		X
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	A2	Group 1	Known	X
TALC (RESPIRABLE DUST) 14807-96-6		Group 3		

Reproductive effects May damage fertility or the unborn child.

STOT - single exposure Eyes, Central Nervous System (CNS), Skin

STOT - repeated exposure Gastrointestinal tract (GI), Central Vascular System (CVS), EYES, Lungs, Respiratory system, Skin

Aspiration hazard No information available.

Acute Toxicity 13.60934 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
TALC (RESPIRABLE DUST) 14807-96-6		100: 96 h Brachydanio rerio g/L LC50 semi-static	
2,2,4-TRIMETHYL-1,3-PENTANEDIOL 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: 72 h Desmodesmus subspicatus mg/L EC50	1.24: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.42 - 1.28: 96 h Lepomis macrochirus mg/L LC50 static 0.71 - 1.2: 96 h Pimephales promelas mg/L LC50 flow-through 1.38 - 1.74: 96 h Lepomis macrochirus mg/L LC50 flow-through 1.24 - 5.3: 96 h Oncorhynchus mykiss mg/L LC50 static 0.31 - 5.45: 96 h Pimephales promelas mg/L LC50 static	3.4: 48 h Daphnia magna mg/L EC50 2.99: 48 h Daphnia magna mg/L EC50 Static
DIPROPYLENE GLYCOL BUTYL ETHER 29911-28-2		841: 96 h Poecilia reticulata mg/L LC50 static	

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Mobility in Environmental Media

Component	log Pow
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE 25265-77-4	3.47
DIBUTYL PHTHALATE 84-74-2	5.38
DIPROPYLENE GLYCOL BUTYL ETHER 29911-28-2	1.523

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Component	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

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name paint,water base freezable Not regulated

IATA

Proper Shipping Name Not regulated

Additional information Call TNEMEC 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	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

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

Component	**HAPS Data**
DIBUTYL PHTHALATE	

United States of America

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:

Component	SARA 313 - Threshold Values
DIBUTYL PHTHALATE - 84-74-2	1.0
ALUMINUM OXIDES - 1344-28-1	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

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
DIBUTYL PHTHALATE 84-74-2	10 lb	X	X	X

CERCLA

Component	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

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Component	California Prop. 65
TITANIUM DIOXIDE (TOTAL DUST) - 13463-67-7	Carcinogen
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen
DIBUTYL PHTHALATE - 84-74-2	Developmental Female Reproductive Male Reproductive

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	X	X	X
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	X	X	X
TALC (RESPIRABLE DUST) 14807-96-6	X	X	X
DIBUTYL PHTHALATE 84-74-2	X	X	X
ALUMINUM OXIDES 1344-28-1	X	X	X
ZIRCONIUM OXIDE 1314-23-4		X	

16. OTHER INFORMATION

NFPA	**Health** 2	**Flammability** 0	**Instability** 1	**Physical hazard** *
HMIS (Hazardous Material Information System)	**Health** 2*	**Flammability** 0	**Reactivity** 1	

Prepared By Tnemec Regulatory Dept: 816-474-3400
Revision Date 01-Jul-2015
Revision Summary
1 4 5 6 7 10 8 9 11 14 15

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