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 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)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>2B</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>1B</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>1</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>1</td>
</tr>
</tbody>
</table>

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements
Causes eye irritation
May damage fertility or the unborn child
Causes damage to organs
Causes damage to organs through prolonged or repeated exposure
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
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
0.02360629 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE (TOTAL DUST)</td>
<td>13463-67-7</td>
<td>10 - 30%</td>
</tr>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ)</td>
<td>14808-60-7</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>TALC (RESPIRABLE DUST)</td>
<td>14807-96-6</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>2,2,4-TRIMETHYL-1,3-PENTANEDIOL</td>
<td>25265-77-4</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>MONOISOButYRATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIBUTYL PHTHALATE</td>
<td>84-74-2</td>
<td>1 - 10%</td>
</tr>
</tbody>
</table>

*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  

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³ TWA: 15 mg/m³</td>
<td>5000 mg/m³</td>
</tr>
<tr>
<td>CRystalline Silica (QUartz) 14808-60-7</td>
<td>TWA: 0.025 mg/m³</td>
<td>TWA: 0.1 mg/m³</td>
<td>50 mg/m³</td>
</tr>
<tr>
<td>TALC (RESPIRABLE DUST) 14807-96-6</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>1000 mg/m³</td>
</tr>
<tr>
<td>DIBUTYL PHthalate 84-74-2</td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 5 mg/m³</td>
<td>4000 mg/m³</td>
</tr>
</tbody>
</table>

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
1029-00WH ENDURATONE TNEMEC WHITE

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

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.

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ) 14808-60-7</td>
<td>= 500 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE 25265-77-4</td>
<td>= 3200 mg/kg (Rat)</td>
<td>&gt; 15200 mg/kg (Rat)</td>
<td>&gt; 3.55 mg/L (Rat) 6 h</td>
</tr>
<tr>
<td>DIBUTYL PHTHALATE 84-74-2</td>
<td>= 7499 mg/kg (Rat)</td>
<td>&gt; 20 mL/kg (Rabbit)</td>
<td>&gt; 15.68 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7</td>
<td></td>
<td>Group 2B</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ) 14808-60-7</td>
<td>A2</td>
<td>Group 1</td>
<td>Known</td>
<td>X</td>
</tr>
<tr>
<td>TALC (RESPIRABLE DUST) 14807-96-6</td>
<td></td>
<td>Group 2B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Target organ effects

Central Vascular System (CVS), Gastrointestinal tract, Eyes, respiratory system.

Aspiration hazard

No information available.

Acute Toxicity

0.02360629 % of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document.

Ecotoxicity

Harmful to aquatic life

75.1607 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td>TALC (RESPIRABLE DUST) 14807-96-6</td>
<td></td>
<td>100: 96 h Brachydanio rerio g/L LC50 semi-static</td>
<td></td>
</tr>
<tr>
<td>2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE 25265-77-4</td>
<td>18.4: 72 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>30: 96 h Pimephales promelas mg/L LC50</td>
<td>95: 96 h Daphnia magna mg/L LC50</td>
</tr>
</tbody>
</table>
### Persistence and degradability
No information available.

### Bioaccumulation
No information available.

### Mobility in Environmental Media

<table>
<thead>
<tr>
<th>Component</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE</td>
<td>3.47</td>
</tr>
<tr>
<td>DIBUTYL PHthalATE 84-74-2</td>
<td>5.38</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Component</th>
<th>RCRA</th>
<th>RCRA - Basis for Listing</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBUTYL PHthalATE 84-74-2</td>
<td>U069</td>
<td>Included in waste stream: F039</td>
<td></td>
<td>U069</td>
</tr>
</tbody>
</table>

### 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**

<table>
<thead>
<tr>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complies</td>
<td>Does not comply</td>
<td>Does not comply</td>
</tr>
</tbody>
</table>
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  

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

<table>
<thead>
<tr>
<th>Component</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBUTYL PHTHALATE - 84-74-2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

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  

<table>
<thead>
<tr>
<th>Component</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBUTYL PHTHALATE - 84-74-2</td>
<td>10 lb</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA  

<table>
<thead>
<tr>
<th>Component</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA EHS RQs</th>
<th>RQ</th>
</tr>
</thead>
</table>
| 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  

<table>
<thead>
<tr>
<th>Component</th>
<th>California Prop. 65</th>
</tr>
</thead>
</table>
| TITANIUM DIOXIDE (TOTAL DUST) - 13463-67-7 | Carcinogen  
| CRYSRTALLINE 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
<table>
<thead>
<tr>
<th>Component</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CRYSSTALINE SILICA (QUARTZ) 14808-60-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TALC (RESPIRABLE DUST) 14807-96-6</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DIBUTYL PHTHALATE 84-74-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health 2</th>
<th>Flammability 0</th>
<th>Instability 1</th>
<th>Physical hazard *</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health 2*</td>
<td>Flammability 0</td>
<td>Reactivity 1</td>
<td></td>
</tr>
</tbody>
</table>

Prepared By          Tnemec Regulatory Dept: 816-474-3400
Revision Date        21-Oct-2016
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 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 SDS