

# SDS

## SAFETY DATA SHEET

Oakwood Products, Inc  
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 Estill, SC 29918  
[www.oakwoodchemical.com](http://www.oakwoodchemical.com)

**Phone Numbers:**

Product Information	803-739-8800
Transportation Emergency	800-451-8346
Outside the USA	760-602-8700

**MATERIAL IDENTIFICATION**

NAME: **2,2,3,3-Tetramethylsuccinonitrile**  
 CAS#: [3333-52-6]  
 CAT#: 226145  
 For R&D use only.

**HAZARDS IDENTIFICATION****GHS Classification**

Acute toxicity, oral (Category 2)  
 Acute toxicity, dermal (Category 3)  
 Acute toxicity, inhalation (Category 3)  
 Specific target organ toxicity, single exposure (Category 2)  
 Specific target organ toxicity, single exposure (Category 2)

**GHS Label elements, including precautionary statements**

Pictograms



Signal Word

Danger

Hazard Statement(s)

H300	Fatal if swallowed
H311	Toxic in contact with skin
H331	Toxic if inhaled
H371	May cause damage to organs
H373	Causes damage to organs through prolonged or repeated exposure

Precautionary Statement(s)

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or

	doctor/physician.
P302 + P352	IF ON SKIN: wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P311	IF exposed or if you feel unwell: call a POISON CENTER or doctor/physician.
P311	Call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

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## COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms	: 2,2,3,3-Tetramethylbutanedinitrile, 2,3-Dicyano-2,3-dimethylbutane, Tetramethylsuccinic acid dinitrile, Tetramethylsuccinodinitrile
Formula	: C <sub>8</sub> H <sub>12</sub> N <sub>2</sub>
Molecular Weight	: 136.20 g/mol

CAS	Description	Concentration
3333-52-6	2,2,3,3-Tetramethylsuccinonitrile	98%

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## FIRST AID MEASURES

### In case of eye contact

Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

### In case of skin contact

Wash thoroughly with soap and plenty of water. Seek medical attention.

### If inhaled

Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

### If swallowed

Do not induce vomiting. Give water to victim to drink. Seek medical attention.

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## FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.

### Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### Unusual fire and explosion hazards/decomposition of product

emits toxic fumes under fire conditions.

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## ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

**Environmental precautions**

Prevent further leakage if safe to do so.

**Methods and materials for containment and clean up**

Absorb spills on sand or vermiculite and place in closed container for disposal.

**HANDLING AND STORAGE****Precautions for safe handling**

Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.

**Precautions for safe storage**

Keep container tightly closed. Store in a cool, dry, well-ventilated area.

**EXPOSURE CONTROL/PERSONAL PROTECTION****Exposure Limits:**

		TWA	
Component Name (CAS)	Reference	ppm	mg/m3
2,2,3,3-Tetramethylsuccinonitrile (3333-52-6)	OSHA	0.5(SKIN)	3(SKIN)

**Personal protective equipment****Eye/face protection**

Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Hand/skin protection**

Avoid all direct contact with product.  
Wear chemical-resistant gloves.  
Wear protective clothing and boots.  
After contact with skin, wash immediately.

**Respiratory protection**

Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

**PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	white crystalline solid
Odour	no data available
Odour Threshold	no data available
Melting point/Freezing Point	no data available
Boiling Point	no data available
Flash Point	no data available
Evaporation Rate	no data available

Flammability (solid, gas)	no data available
Upper/Lower Flammability or Explosive limits	no data available
Vapour pressure	no data available
Relative Density	no data available
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Refractive Index	no data available

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## STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Incompatible materials

Strong oxidizing agents.

### Hazardous decomposition products

May evolve carbon monoxide, carbon dioxide, and nitrogen oxides.

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## TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

Rat - 27 mg/kg

Behavioral: Somnolence (general depressed activity). Tremor.

Lungs, Thorax, or Respiration: Pulmonary emboli.

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

Developmental toxicity - Hamster - Intraperitoneal  
Effects on embryo or fetus: Fetotoxicity (except death, e.g., stunted fetus).

**STOT-single exposure**

Inhalation - May cause damage to organs. - Nervous system

**STOT-repeated exposure**

Inhalation - May cause damage to organs through prolonged or repeated exposure. Kidney, liver

**Aspiration hazard**

no data available

**Exposure Routes**

Harmful to skin, eyes, and respiratory system.  
May be toxic if inhaled or swallowed.

**Signs and Symptoms of Exposure**

Skin contact or inhalation may result in: Unconsciousness, convulsions, headache, salivation, jaundice, nausea, vomiting.

**Target Organs**

Nervous system, Kidneys, liver

To the best of our knowledge, the health hazards of this material have not been fully investigated.

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**ECOLOGICAL INFORMATION**

**Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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**DISPOSAL CONSIDERATIONS**

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

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**TRANSPORT INFORMATION**

**DOT**

Toxic solids, organic, n.o.s.  
6.1

UN2811 II

**IMDG**

Toxic solid, organic, n.o.s.

6.1

UN2811 II

EMS-No: F-A, S-A

Marine Pollutant: No

**IATA**

Toxic solid, organic, n.o.s.

6.1

UN2811 II

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**REGULATORY INFORMATION**

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

**New Jersey Right to Know Components**

This product contains a chemical on the New Jersey Right to Know Components List.

	<b>CAS</b>
2,2,3,3-Tetramethylsuccinonitrile	3333-52-6

**California Prop. 65 Components**

This product does not contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

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**OTHER INFORMATION**

Version : 1.0

Revision Date : 4/7/2017

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.