

# MSDS MATERIAL SAFETY DATA SHEET

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Oakwood Products, Inc  
1741 Old Dunbar Road  
West Columbia, SC 29172  
www.oakwoodchemical.com

Phone Numbers:

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

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## MATERIAL IDENTIFICATION

NAME: Vinyltris(methylethylketoximo)silane

CAS: [2224-33-1]

CAT: SIV9280

Synonyms: vinyl oxlmino silane, vinyl tris-(butanone oxime)silane.

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## COMPOSITION

Vinyl oximino silane	90.0% min.
2,2-Bis(2-butanone oximino)butane	2.0% max.
Methyl ethyl ketoxime	<1%

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## HEALTH HAZARD INFORMATION

Irritating to eyes, respiratory system, and skin. May cause allergic skin reactions.

Liquid contact in eyes causes irritation and may cause burns if material is not promptly removed.

Inhalation of mist or vapor may irritate the respiratory tract and nasal passage.

Overexposure by inhalation may cause coma and respiratory failure.

Low to moderate oral toxicity. Ingestion may produce blood effects, reducing the blood's ability to transport oxygen. Reversible narcotic effects may occur.

Do not breathe vapor.

Material is listed under TSCA

To the best of our knowledge, the physical and chemical properties of this material have not been fully investigated.

Use caution when handling.

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## EXPOSURE CONTROLS/PERSONAL PROTECTION

**Avoid all direct contact with product**

Wear protective safety goggles

Wear chemical-resistant gloves

Wear protective clothing and boots

Ensure ventilation during use

After contact with skin, wash immediately

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## FIRST AID

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**EYE CONTACT:** Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes while keeping eyes open. COLD water may be used. Seek medical attention.

**SKIN CONTACT:** After contact with skin, wash with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. COLD water may be used. Cover the irritated skin with an emollient. Seek medical attention. Wash any contaminated clothing before reusing.

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

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

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## FIRE MEASURES

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**Flash point:** >62° C

**Combustible liquid.**

**Extinguishing media:** carbon dioxide, dry chemical powder.

**Special fire-fighting procedures:** 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. Thermal decomposition would be expected to produce methyl ethyl ketone, silicon dioxide, nitrogen oxides, carbon monoxide, and carbon dioxide.

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## HANDLING AND STORAGE INFORMATION

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**AVOID ALL DIRECT CONTACT WITH MATERIAL**

**KEEP AWAY FROM HEAT AND OPEN FLAME.**

**DO NOT EXPOSE TO WATER.**

**TRANSFER USING A CLOSED SYSTEM OR MECHANICAL EXHAUST.**

**Wash thoroughly after handling.**

Do not breathe dust or vapor.

Have safety shower and eye wash available.

Do not get in eyes, on skin, on clothing.

Keep container tightly closed.

Store in a cool, dry, well ventilated area

Ensure adequate ventilation during use

Use only in a chemical fume hood.

Avoid sources of ignition

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## ACCIDENTAL RELEASE MEASURES

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**Steps to be taken if material is released or spilled:** Wear appropriate respirator, rubber boots and heavy rubber gloves. Scoop up and place in an appropriate container. Ventilate area and wash spill site after pickup is complete. Wash skin immediately with plenty of water. Absorb on sand or vermiculite and place in closed containers for disposal.

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## DISPOSAL INFORMATION

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Unused product is not a hazardous waste under RCRA.  
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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## PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE: CLEAR, COLORLESS LIQUID

MF: C<sub>14</sub>H<sub>27</sub>N<sub>3</sub>O<sub>3</sub>Si

MW: 313

BP: >300°C

MP: -59°C

VP: 0.2 mm Hg @ 243°F (117°C)

SG: 0.988 g/ml

FP: 62°C

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## REACTIVITY DATA

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INCOMPATIBILITIES: water, iron, and acids. Can react with electrophiles, such as ferric chloride.

HAZARDOUS DECOMPOSITION PRODUCTS: may evolve carbon dioxide, carbon monoxide, nitrogen oxides, silicon dioxide, methyl ethyl ketoxime (MEKO), methyl ethyl ketone.

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## TOXICITY INFORMATION

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ACUTE EFFECTS:

Oral/Rat LD<sub>50</sub> 1.9-2.5 ml/Kg

CHRONIC EFFECTS:

Component and decomposition product Methyl Ethyl Ketoxime (MEKO):

In a sub-chronic oral toxicity animal study, methyl ethyl ketoxime produced an adverse effect upon red blood cells. This was found for all dose levels tested. In an acute dermal animal study, 200 mg/Kg caused blood effects. No effects were seen at 20 mg/Kg. Liver carcinomas were observed in a lifetime inhalation study in which mice and rats were exposed to MEKO 6hrs/day, 5 days/week for 18 months and 26 months respectively. These carcinomas were statistically increased in males at a MEKO concentration of 375 ppm. The effects at 15 ppm were minimal. The effect at all concentrations was limited to the olfactory tissue situated in the anterior dorsal region of the nasal cavity. Large areas of olfactory epithelium laterally and posteriorly were not affected. A subsequent sub-chronic inhalation study in mice found the effect after one week of exposure at 30 ppm (6hrs/day, 5 days/week) but no increase in incidence or severity occurred with increasing exposure duration up to 13 weeks. Evidence of recovery was found after cessation of exposure. The no-effect level was 3 ppm.

MEKO is not considered mutagenic based on several in vitro and in vivo studies.

To the best of our knowledge, the toxicological properties of this product have not been fully determined.

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Vinyltris(methylethylketoximo)silane  
November 20, 2000

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**TRANSPORT INFORMATION**

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Classed non-hazardous.

*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.*