

# CAT-50

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Revision Date: 03/06/2024 Date of Issue: 12/15/2014



Version: 4.0

### SECTION 1: Identification

#### 1.1. Product Identifier

Product Form Mixture  
Product Name CAT-50  
Synonyms Platinum Catalyst

#### 1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use of the Substance/Mixture For professional use only.

#### 1.3. Details of the Supplier of the Safety Data Sheet

NuSil Technology LLC  
1050 Cindy Lane  
Carpinteria, California 93013  
USA  
(805) 684-8780  
[productstewardship@avantorsciencesgcc.com](mailto:productstewardship@avantorsciencesgcc.com)  
[www.nusil.com](http://www.nusil.com)

#### 1.4. Emergency Telephone Number

Emergency Number 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and Maritime)

### SECTION 2: Hazards Identification

#### 2.1. Classification of the Substance or Mixture

##### GHS-US Classification

Flammable liquids Category 3 H226  
Serious eye damage/eye irritation Category 1 H318  
Reproductive toxicity Category 2 H361  
Hazardous to the aquatic environment – Chronic Hazard Category 3 H412

#### 2.2. Label Elements

##### GHS-US Labeling

Hazard Pictograms (GHS-US)



GHS02



GHS05



GHS08

Signal Word (GHS-US)

Danger

Hazard Statements (GHS-US)

H226 - Flammable liquid and vapor  
H318 - Causes serious eye damage  
H361 - Suspected of damaging fertility or the unborn child  
H412 - Harmful to aquatic life with long lasting effects

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### Precautionary Statements (GHS-US)

P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/Bond container and receiving equipment.  
P241 - Use explosion-proof electrical, ventilating, and lighting equipment.  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, and eye protection.  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a poison center or doctor.  
P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

### 2.3. Other Hazards

Other Hazards Not Contributing to the Classification

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US)

No additional information available

## SECTION 3: Composition/Information On Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product Identifier	%*	GHS-US Classification
Tetramethyldivinyldisiloxane	(CAS-No.) 2627-95-4	10 - 30	Flam. Liq. 2, H225
Platinum Catalyst	(CAS-No.) 68478-92-2	< 10	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2	< 0.25	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 1, H410

\*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

Full text of H-phrases: see section 16

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### SECTION 4: First Aid Measures

#### 4.1. Description of First-aid Measures

First-aid Measures General	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid Measures After Inhalation	When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
First-aid Measures After Skin Contact	Immediately drench affected area with water for at least 15 minutes. Immediately remove contaminated clothing. If exposed or concerned: Get medical advice/attention.
First-aid Measures After Eye Contact	Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid Measures After Ingestion	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries	Suspected of damaging fertility or the unborn child. Causes serious eye damage.
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	Suspected of damaging fertility or the unborn child.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

### SECTION 5: Fire-Fighting Measures

#### 5.1. Extinguishing Media

Suitable Extinguishing Media	: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ). Water may be ineffective but water should be used to keep fire-exposed container cool.
Unsuitable Extinguishing Media	: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

#### 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard	Flammable liquid and vapor. Vapors may travel to source of ignition and flash back. Will float and can be reignited on water surface.
Explosion Hazard	May form flammable or explosive vapor-air mixture.
Reactivity	Reacts violently with strong oxidizers. Increased risk of fire or explosion.

#### 5.3. Advice for Firefighters

Precautionary Measures Fire	Exercise caution when fighting any chemical fire.
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Firefighting Instructions	Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection During Firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products	Carbon oxides (CO, CO <sub>2</sub> ). Silicon oxides. Oxides of platinum. Formaldehyde.
Other Information	Do not allow run-off from fire fighting to enter drains or water courses.

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment And Emergency Procedures

General Measures	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.
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#### 6.1.1. For Non-Emergency Personnel

Protective Equipment	Use appropriate personal protective equipment (PPE).
Emergency Procedures	Evacuate unnecessary personnel. Stop leak if safe to do so.

#### 6.1.2. For emergency responders

Protective Equipment	Equip cleanup crew with proper protection.
Emergency Procedures	Eliminate ignition sources first, then ventilate the area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

### 6.3. Methods and Materials for Containment and Cleaning Up

For Containment	As an immediate precautionary measure, isolate spill or leak area in all directions. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for Cleaning Up	Clean up spills immediately and dispose of waste safely. Use only non-sparking tools. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: Handling And Storage

### 7.1. Precautions for Safe Handling

Additional Hazards When Processed	Handle empty containers with care because residual vapors are flammable. Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapors.
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### Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only non-sparking tools. Take precautionary measures against static discharge. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist, or spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety procedures.

## 7.2. Conditions for Safe Storage, Including Any Incompatibilities

### Technical Measures

Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

### Storage Conditions

Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

### Incompatible Materials

Strong acids, strong bases, strong oxidizers.

## 7.3. Specific End Use(s)

For professional use only.

# SECTION 8: Exposure Controls/Personal Protection

## 8.1. Control Parameters

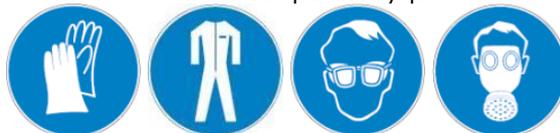
For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), or OSHA (PEL).

## 8.2. Exposure Controls

### Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Gas detectors should be used when flammable gases or vapors may be released. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.

### Personal Protective Equipment



### Materials For Protective Clothing

Chemically resistant materials and fabrics. Wear fire/flamm resistant/retardant clothing.

### Hand Protection

Wear protective gloves.

### Eye And Face Protection

Chemical safety goggles.

### Skin And Body Protection

Wear suitable protective clothing.

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### Respiratory Protection

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

### Other Information

When using, do not eat, drink or smoke.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	Liquid
Appearance	Colorless to yellow
Odor	Odorless
Odor Threshold	No data available
pH	No data available
Evaporation Rate	No data available
Melting Point	No data available
Freezing Point	No data available
Boiling Point	No data available
Flash Point	49 – 61 °C (120 – 142 °F)
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Flammability (solid, gas)	Not applicable
Vapor Pressure	No data available
Relative Vapor Density at 20 °C	No data available
Relative Density	< 1 (Water = 1)
Specific Gravity	< 1
Solubility	No data available
Partition Coefficient n-Octanol/Water	No data available
Viscosity	No data available

### 9.2. Other Information

VOC Content < 1%

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

Reacts violently with strong oxidizers. Increased risk of fire or explosion.

### 10.2. Chemical Stability

Flammable liquid and vapor. May form flammable or explosive vapor-air mixture.

### 10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

### 10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

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### 10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides. Oxides of platinum. Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

Acute Toxicity (Oral)	Not classified
Acute Toxicity (Dermal)	Not classified
Acute Toxicity (Inhalation)	Not classified

Tetramethyldivinylsiloxane (2627-95-4)	
LD50 Oral Rat	> 10 g/kg (Source: NLM_CIP)
LC50 Inhalation Rat	> 1875 mg/m <sup>3</sup> (Exposure time: 6 h Source: ECHA_API)
Octamethylcyclotetrasiloxane (556-67-2)	
LD50 Oral Rat	> 4800 mg/kg (No mortality)
LD50 Dermal Rat	> 2375 mg/kg (Source: ECHA)
LD50 Dermal Rabbit	> 2.5 ml/kg (No mortality)
LC50 Inhalation Rat	36 mg/l/4h

Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Causes serious eye damage.
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	Suspected of damaging fertility or the unborn child.

## SECTION 12: Ecological Information

### 12.1. Toxicity

Ecology - General Harmful to aquatic life with long lasting effects.

Tetramethyldivinylsiloxane (2627-95-4)	
LC50 Fish 1	> 0.13 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through] Source: ECHA)



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Packing Group III  
Label Codes 3  
EmS-No. (Fire) F-E  
EmS-No. (Spillage) S-E



### 14.3. In Accordance with IATA

Proper Shipping Name FLAMMABLE LIQUID, N.O.S. (Tetramethyldivinylsiloxane)  
Packing Group III  
Identification Number UN1993  
Hazard Class 3  
Label Codes 3  
ERG Code (IATA) 3L



## SECTION 15: Regulatory Information

### 15.1. US Federal Regulations

All components in this mixture are listed on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, have been exempted, or are not disclosed due to CBI requirements or disclosure rules according to the relevant regulation.

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SARA Section 311/312 Hazard Classes	Health hazard - Reproductive toxicity Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Serious eye damage or eye irritation

### 15.2. US State Regulations

Octamethylcyclotetrasiloxane (556-67-2)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
U.S. - Maine - Chemicals of Concern
U.S. - Oregon - Priority Persistent Pollutant - Tier I - Persistent Pollutants
U.S. - Minnesota - Chemicals of High Concern
U.S. - Minnesota - Chemicals of High Concern - Persistent Bioaccumulative Toxins
U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups

## SECTION 16: Other Information, Including Date of Preparation or Last Revision

Date of Preparation or Latest Revision 03/06/2024

Other Information This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child
H410	Very toxic to aquatic life with long lasting effects

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H412

Harmful to aquatic life with long lasting effects

NFPA Health Hazard

3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA Fire Hazard

2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA Reactivity Hazard

0 - Material that in themselves are normally stable, even under fire conditions.

HMIS III Rating  
Health

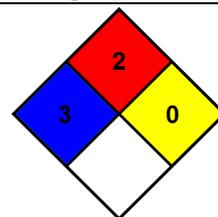
3 Serious Hazard

\* Chronic - Chronic (long-term) health effects may result from repeated overexposure

Flammability  
Physical

2 Moderate Hazard

0 Minimal Hazard



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