

SAFETY DATA SHEET

STO-50 Silicone Transformer Oil



Data Prepared: July 23, 2025

SECTION 1: Identification

Product name: STO-50 Silicone Transformer Oil

Other means of identification

Synonyms: Poly dimethyl siloxane

Manufacturer or supplier details

Company name of supplier : Clearco Products Co Inc.

Address : 15 York Rd.
Willow Grove, PA 19090 U.S.A.

Telephone : 215-366-7860

Emergency Telephone : **VelocityEHS: 1-800-255-3924 (DOMESTIC)**
+01-813-248-0585 (INTERNATIONAL)
Contract# MIS0001670

Recommended use of the chemical and restrictions on use

Recommended use : Electrical industry and electronics
Insulating materials

SECTION 2: Hazards identification

Hazard Classification

Not classified

Label Elements

Hazard Symbol: No symbol
Signal Word: No signal word
Hazard Statement: Not applicable
Target Organs: No data available
Precautionary Statement
Prevention: No applicable
Response: Not applicable
Storage: Not applicable
Disposal: Not applicable

Other hazards which do not result in GHS classification:

None.

SECTION 3: Composition/information on ingredients

Substance

Composition Comments: The components are not hazardous or are below required disclosure limits.

SECTION 4: First aid measures

Ingestion: If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice. Never give liquid to an unconscious person.

Inhalation: If inhaled, remove fresh air. If not breathing, give artificial respiration using a barrier device. If breathing is difficult, give oxygen. Get medical attention.

Skin contact: Wash area with soap and water. Get medical attention if symptoms occur.

Eye contact: Rinse immediately with plenty of water. Consult a physician for specific advice.

Most important symptoms/effects, acute and delayed

Symptoms: No data available

Indication of immediate medical attention and special treatment needed

Treatment: Treatment is symptomatic and supportive.

SECTION 5: Firefighting measures

General Fire Hazards: No data available

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: All standard extinguishing agents are suitable

Unsuitable extinguishing media: No data available

Special protective equipment and precautions for firefighters

Special firefighting procedures: No data available

Special protective equipment for firefighters: Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep container closed. Keep out of reach of children. Attention: Not for injection into humans

Methods and material for containment and cleaning up: Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section.

Environmental Precautions: Do not allow runoff to sewer, waterway or ground.

SECTION 7: Handling and storage

Precautions for safe handling: Sensitivity to static discharge is not expected

Conditions for safe storage including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place.

SECTION 8: Exposure controls/personal protection

Control Parameters

Occupation Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering Controls

Eye wash facilities and emergency shower must be available when handling this product. Ventilation and others forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

Individual protection measures, such as personal protective equipment

General information:

No data available

Eye/face protection:

Safety glasses with side shields

Skin Protection

Hand Protection:

Chemical resistant gloves

Other:

Wear suitable protective clothing and eye/face protection

Respiratory Protection:

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

Hygiene measures:

No data available.

SECTION 9: Physical and chemical properties

Appearance

Physical state:

liquid

Form:

liquid

Color:

Colorless

Odor:

Odorless

Odor threshold:

No data available

pH:

Not applicable

Melting point/freezing point:

<-25°C

Initial boiling point and boiling range:

>200°C

Flash Point:

>300°C

Evaporation rate:

<1 (n-Butyl acetate=1)

Flammability (solid, gas):

No data available

Upper/lower limit on flammability or explosive limits

Flammability limit-upper (%):

No data available

Flammability limit-lower (%):

No data available

Explosive limit-upper (%):

No data available

Explosive limit-lower (%):	No data available
Vapor pressure:	1.33 hPa (20°C)
Vapor density:	Heavier than air
Density:	ca. 0.96g/cm ³
Relative density:	ca. 0.963
Solubility (ies)	
Solubility in water:	Insoluble
Solubility (other):	No data available
Partition coefficient (n-octanol/water) Log Pow:	No data available
Auto-ignition temperature:	Not applicable
Decomposition temperature:	No data available
SADT:	No data available
Viscosity, dynamic:	No data available
Viscosity, kinematic:	50 mm ² /s

SECTION 10: Stability and reactivity

Reactivity:	No data available
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	None known.
Incompatible Materials:	None known.
Hazardous Decomposition Products:	In case of fire, gives off (emits): Carbon dioxide Carbon Monoxide. Silicon dioxide. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Measurements at temperatures above 150°C in presence of air (oxygen) have shown small amounts of formaldehyde due to oxidative degradation.

SECTION 11: Toxicological information

Information on likely routes of exposure

Ingestion:	No data available
Inhalation:	No data available
Skin Contact:	No data available
Eye Contact:	No data available

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available
Inhalation:	No data available
Skin Contact:	No data available
Eye Contact:	No data available

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product:	LD 50 (Rat): >5,000 mg/kg
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Dermal Product:	LD50 (Rabbit): >10,000 mg/kg
Inhalation Product:	Not classified for acute toxicity based on available data.
Repeated dose toxicity Product:	(Mouse, Oral, 5 d): 25 mg/kg No adverse effects due to ingestion are expected.
Skin Corrosion/Irritation Product:	(Rabbit): No skin irritation Literature Reference
Serious Eye Damage/Eye Irritation Product:	(Rabbit): No eye irritation Literature Reference
Respiratory or Skin Sensitization Product:	Magnusson-Kligmann, OECD-Guideline 406 (Skin Sensitization) (Guinea Pig): negative Did not cause sensitization on laboratory animals. Literature Reference
Carcinogenicity Product:	No data available
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components identified	
US. National Toxicology Program (NTP) Report on Carcinogens: No carcinogenic components identified	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified	
Germ Cell Mutagenicity	
In vitro Product:	Ames-Test: negative (not mutagenic) Literature Reference
In vivo Product:	Dominant lethal assay (OECD 478) (Mouse): negative (not mutagenic)
Reproductive toxicity Product:	No data available
Specific Target Organ Toxicity-Single Exposure Product:	No data available
Specific Target Organ Toxicity-Repeated Exposure Product:	No data available
Target Organs	No data available
Aspiration Hazard Product:	No data available

Other effects: No data available

SECTION 12: Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available

Aquatic Invertebrates

Product: No data available

Toxicity to Aquatic Plants

Product: No data available

Persistence and Degradability

Biodegradation

Product: No data available

BOD/COD Ratio

Product: No data available

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available

Partition Coefficient n-octanol/water (log Kow)

Product: No data available

Mobility in Soil:

No data available

Known or predicted distribution to environmental compartments

Polydimethylsiloxane No data available

Other Adverse Effects:

No data available

SECTION 13: Disposal considerations

Disposal Instruction:

Disposal should be made in accordance with federal, state and local regulations.

Contaminated Packaging:

No data available

SECTION 14: Transport information

DOT

Not regulated

IMDG

Not regulated

IATA

Not regulated

Special precautions for user:

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

SECTION 15: Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities

US OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Chemical Identity

Polydimethylsiloxane

OSHA hazard(s)

No OSHA Hazards

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

No SARA Hazards

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities

SARA 304 Emergency Release Notification

None present or none present in regulated quantities

SARA 311/312 Hazardous Chemical

None present or none present in regulated quantities

SARA 313 (TRI Reporting)

None present or none present in regulated quantities

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities

Clear Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

None present or none present in regulated quantities

US State Regulations

US California Proposition 65

No ingredient regulated by CA Prop 65 present.

US New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present

US Massachusetts RTK-Substance List

No ingredient regulated by MA Right-to-Know Law present.

US Pennsylvania RTK- Hazardous Substances

No ingredients regulated by PA Right-to-Know Law present

US Rhode Island RTK

No ingredients regulated by RI Right-to-Know Law present.

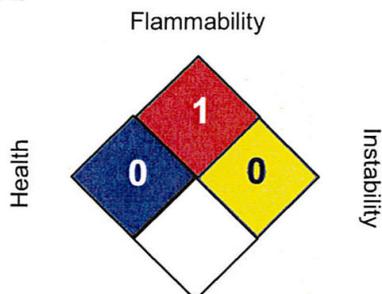
Inventory Status:

Australia AICS:	Y (positive listing)	Remarks: None
Canada DSL Inventory List:	Y (positive listing)	Remarks: None
EU EINECS List:	Y (positive listing)	Remarks: None
Japan (ENCS) List:	Y (positive listing)	Remarks: None
China Inventory of Existing Chemical Substances:	Y (positive listing)	Remarks: None
Korea Existing Chemicals Inv. (KECI):	Y (positive listing)	Remarks: None
Canada NDSL Inventory:	N (Negative listing)	Remarks: None
Philippines PICCS:	Y (positive listing)	Remarks: None
US TSCA Inventory:	Y (positive listing)	Remarks: ON TSCA Inventory
New Zealand Inventory of Chemicals:	Y (positive listing)	Remarks: None
Taiwan. Taiwan inventory (CSNN):	n (Negative listing)	Remarks: None

SECTION 16: Other information

Further Information

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

Further Information:

No data available