

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by
Regulation(EU) No. 2020/878

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: TN3005

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Not available.

Uses advised against: Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Importer/Distributor Information : Reinhardoil.dk ApS
Helleruplund alle 8
2900 Hellerup
Denmark

Contact person : mail@reinhardoil.dk

Telephone : General information
+45 70 26 70 07

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Emergency telephone number : Europe, Israel & All other: +44 (0) 1235239670; Middle East:+44
(0) 1235239671

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Not classified

The product is not classified for chronic aquatic toxicity, for further details see section 16

2.2 Label Elements

Not applicable

Supplemental label information

EUH210: Safety data sheet available on request.

Additional Information: No data available.

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2.3 Other hazards

Endocrine disrupting properties-Toxicity

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Endocrine disrupting properties-Ecotoxicity

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

Chemical nature: Mixture of polydimethylsiloxanes, fillers and cross-linkers.

3.2 Mixtures

General information: No data available.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Titanium, Bis(ethyl acetoacetate)-diisopropoxy	1 - <5%	27858-32-8	248-697-2	No data available.	Not applicable	
Octamethylcyclotetrasiloxane	0,01 - <0,1%	556-67-2	209-136-7	01-2119529238-36-XXXX	Aquatic Toxicity (Chronic): 10	PBT, vPvB

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

Chemical name	Classification	Notes
Titanium, Bis(ethyl acetoacetate)-diisopropoxy	Flam. Liq.: 3: H226; Eye Dam.: 2: H319; STOT SE: 3: H336;	
Octamethylcyclotetrasiloxane	Flam. Liq.: 3: H226; Repr.: 2: H361f; Aquatic Chronic: 1: H410;	No data available.

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Move into fresh air and keep at rest.

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Eye contact:	Rinse the eye with water immediately. If eye irritation persists: Get medical advice/attention.
Skin Contact:	After contact with skin, remove product mechanically. Wash area with soap and water. Get medical attention.
Ingestion:	Rinse mouth. Do NOT induce vomiting. Consult a physician for specific advice.

4.2 Most important symptoms and effects, both acute and delayed: No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: No data available.

SECTION 5: Firefighting measures

General Fire Hazards: Use standard firefighting procedures and consider the hazards of other involved materials. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

5.1 Extinguishing media
Suitable extinguishing media: All standard extinguishing agents are suitable.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

5.2 Special hazards arising from the substance or mixture: In case of fire, carbon monoxide and carbon dioxide may be formed.

5.3 Advice for firefighters
Special fire-fighting procedures: Move container from fire area if it can be done without risk. Cool fire-endangered containers with water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Provide adequate ventilation. Use personal protective equipment.

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

6.3 Methods and material for containment and cleaning up: Use mechanical handling equipment. Shovel up and place in a container for salvage or disposal.

6.4 Reference to other sections: No data available.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Methanol is formed during processing. Wear appropriate personal protective equipment.

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Storage conditions: Keep away from heat, sparks and open flame. Keep container tightly closed in a cool, well-ventilated place.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a cool, well-ventilated place.

Storage Stability: Material is stable under normal conditions.

7.3 Specific end use(s): No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Biological Limit Values

None.

8.2 Exposure controls

Appropriate Engineering Controls: No data available.

Individual protection measures, such as personal protective equipment

General information: Wear suitable gloves and eye/face protection.

Eye/face protection: Safety glasses with side-shields conforming to EN166 Safety glasses with side shields

Skin protection

Hand Protection: Advice: There is no risk to health due to contact with the chemical. Use hand protection to prevent mechanically injuries.

Other: Chemical resistant clothing Wear rubber boots.

Respiratory Protection: In case of inadequate ventilation use suitable respirator.

Hygiene measures: Provide adequate ventilation. Observe good industrial hygiene practices. Avoid contact with eyes, skin, and clothing. Wash hands after handling. When using do not eat, drink or smoke.

Environmental exposure controls: No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: solid

Form: solid

Color: Black

Odor: Faint

Odor Threshold: No data available.

pH: Not applicable

Melting Point: No data available.

Boiling Point: No data available.

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Flash Point:	118 °C
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	Not applicable
Relative vapor density:	No data available.
Density:	1,03 g/cm ³ (23 °C)
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	Insoluble
Solubility (other):	Insoluble
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No decomposition if stored and applied as directed.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	> 20,5 mm ² /s (40 °C)
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2 Other information

VOC Content:	30 g/l
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SECTION 10: Stability and reactivity

10.1 Reactivity:	Reacts with water liberating small amounts of methanol.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Hazardous polymerization does not occur.
10.4 Conditions to avoid:	Keep away from moisture. Keep away from heat, sparks and open flame.
10.5 Incompatible Materials:	Strong Acids, Strong Bases
10.6 Hazardous Decomposition Products:	Carbon oxides Oxides of silicon. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

SECTION 11: Toxicological information

General information:	Our Experience shows that our Silicone Elastomer products can be handled without risk to health if used properly and if the usual precautions for industrial hygiene are observed.
Information on likely routes of exposure	
Inhalation:	No data available.
Ingestion:	No data available.

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Skin Contact: No data available.

Eye contact: No data available.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

LD 50 (Rat): > 4.800 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

LD 50 (Rat): > 2.375 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

LC50 (Rat, 4 h): 36 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

No data available.

Skin Corrosion/Irritation:

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

OECD Test Guideline 404 (Rabbit): Non irritating

Serious Eye Damage/Eye

Irritation:

Product: No data available.

Specified substance(s)

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Titanium, Bis(ethyl acetoacetate)-diisopropoxy Octamethylcyclotetrasiloxane	No data available.
	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit): Non irritating

Respiratory or Skin

Sensitization:

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy Octamethylcyclotetrasiloxane	No data available.
	Maximisation Test, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig): Not sensitizing

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy Octamethylcyclotetrasiloxane	No data available.
	Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic) Mouse Lymphoma Assay (OECD Guideline 476): negative (not mutagenic)

In vivo

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy Octamethylcyclotetrasiloxane	No data available.
	Chromosomal aberration (OECD 475) Inhalation (Rat, male and female): negative Dominant lethal assay (OECD 478) Oral (Rat, male and female): negative

Carcinogenicity

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy Octamethylcyclotetrasiloxane	No data available.
	No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy Octamethylcyclotetrasiloxane	No data available.
	No data available.

Specific Target Organ Toxicity - Single Exposure

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Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy
Octamethylcyclotetrasiloxane No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy
Octamethylcyclotetrasiloxane No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy
Octamethylcyclotetrasiloxane No data available.

11.2 Information on other hazards

Endocrine disrupting properties

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;

Components:

Titanium, Bis(ethyl acetoacetate)-diisopropoxy
Octamethylcyclotetrasiloxane No data available.

Other effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy
Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; LC50 (Oncorhynchus mykiss, 96 h): > 0,022 mg/l

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Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

No toxicity at the limit of solubility ; EC50 (Daphnia magna, 48 h): > 0,015 mg/l

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

No toxicity at the limit of solubility ; NOEC (Oncorhynchus mykiss, 93 d): >= 0,0044 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

No toxicity at the limit of solubility ; NOEC (Daphnia magna, 21 d): > 0,015 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

No toxicity at the limit of solubility ; ErC50 (Selenastrum capricornutum, 96 h): > 0,022 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

Octamethylcyclotetrasiloxane

(29 d, 310 Ready Biodegradability - CO₂ in Sealed Vessels (Headspace Test)): 3,7 % Persistent Not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy

No data available.

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Octamethylcyclotetrasiloxane No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

Titanium, Bis(ethyl acetoacetate)-diisopropoxy No data available.

Octamethylcyclotetrasiloxane Bioconcentration Factor (BCF): 12.400

12.4 Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

Titanium, Bis(ethyl acetoacetate)-diisopropoxy No data available.

Octamethylcyclotetrasiloxane No data available.

12.5 Results of PBT and vPvB assessment:

No data available.

Titanium, Bis(ethyl acetoacetate)-diisopropoxy No data available.

Octamethylcyclotetrasiloxane Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB)

Octamethylcyclotetrasiloxane (D4) meets the current EU REACH Annex XIII criteria for PBT and vPvB and has been added to the candidate list for Substances of very high concern (SVHC)., *However our understanding of the available science is that D4 does not behave similarly to known PBT/vPvB substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by naturally occurring reactions in the atmosphere. Any D4 in air that does not degrade by these reactions is not expected to deposit from the air to water, to land, or to living organisms.*

12.6 Endocrine disrupting properties:

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Components:

Titanium, Bis(ethyl acetoacetate)-diisopropoxy No data available.

Octamethylcyclotetrasiloxane No data available.

12.7 Other adverse effects:

Other hazards

Product: No data available.

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Additional Information: Ecotoxicological data for this product is not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: The generation of waste should be avoided or minimized wherever possible. Do not discharge into drains, water courses or onto the ground. See Section 8 for information on appropriate personal protective equipment.

Disposal methods: Can be incinerated when in compliance with local regulations.

SECTION 14: Transport information

ADR

Not regulated.

ADN

Not regulated.

RID

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

14.6 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. Protect from moisture. Keep away from food, foodstuff, acids and bases. keep away from odour sensitive materials

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code :

Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: none

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances: none

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EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended: none

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): none

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use: none

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.: none

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.: none

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I: None present or none present in regulated quantities.

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants: none

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work: none

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

Inventory Status

Australia AICS:	n (negative listing)	Remarks: None.
Canada DSL Inventory List:	q (quantity restricted)	Remarks: At least one component is not listed in DSL but all such components are listed in NDSL.
EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	y (positive listing)	Remarks: None.
China Inv. 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 Chemical Substance Inventory:	y (positive listing)	Remarks: None.

SECTION 16: Other information

Revision Information:

Not relevant.

Key literature references and sources for data:

The partition coefficient of D4 between PDMS and water has been determined as $\log K_{PDMS-water} = 7.09$. It follows that PDMS containing up to 3%w/w D4 will generate a thermodynamic limit concentration of 2.4 µg D4/L in the water phase. The critical 21d-NOEC for daphnia of 7.9 µg D4/L will not be reached. The product is therefore not classified for chronic aquatic toxicity

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Wording of the H-statements in section 2 and 3

H226	Flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Training information: No data available.

Issue Date: 28.10.2022

Disclaimer:

Notice to reader

Unless otherwise specified in section 1.2, Momentive Products are intended for industrial application only.

They are not intended for specific medical applications, neither for long-lasting (> 30 days) implantation into the human body, injected or directly ingested, nor for the manufacture of multiple usable contraceptives.

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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