

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03 December 2019 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
 Product name : Thermo-Sil Pro Silicone Coating

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

1.3. Details of the supplier of the safety data sheet

Icynene-Lapolla
 15402 Vantage Parkway East, Ste. 322
 Houston, Texas 77032
 Tel: +1 281 219 4100 , (877) 636-2648
 Email: sds@icynene-lapolla.com

1.4. Emergency telephone number

Emergency number : CARECHEM (866) 928-0789

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 4 H227
 Carc. 2 H351

Full text of H-statements: see section 16

2.2. Label elements

GHS-US labelling

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Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Danger
 Hazard statements (GHS-US) : H227 - Combustible liquid
 H351 - Suspected of causing cancer
 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/sparks/open flames/hot surfaces. - No smoking
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P308+P313 - If exposed or concerned: Get medical advice/attention
 P370+P378 - In case of fire: Use ... to extinguish
 P403+P235 - Store in a well-ventilated place. Keep cool
 P405 - Store locked up
 P501 - Dispose of contents/container to ...

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	GHS-US classification
poly(dimethylsiloxane)	(CAS No) 9016-00-6	40 - 60	Not classified
silica, pyrogenic	(CAS No) 112945-52-5	30 - 40	Not classified
titanium(IV) oxide	(CAS No) 13463-67-7	0 - 10	Carc. 2, H351
butan-2-one O,O',O''-(methylsilyldiylidene)trioxime	(CAS No) 22984-54-9	1 - 5	Flam. Liq. 4, H227
3-aminopropyltrimethoxysilane	(CAS No) 13822-56-5	1 - 3	Flam. Liq. 4, H227

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible liquid.
- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Store locked up.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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ACGIH	Not applicable
OSHA	Not applicable

poly(dimethylsiloxane) (9016-00-6)

ACGIH	Not applicable
OSHA	Not applicable

titanium(IV) oxide (13463-67-7)

ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (Titanium dioxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
OSHA	Not applicable	

butan-2-one O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)

ACGIH	Not applicable
OSHA	Not applicable

3-aminopropyltrimethoxysilane (13822-56-5)

ACGIH	Not applicable
OSHA	Not applicable

silica, pyrogenic (112945-52-5)

ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Hand protection : Protective gloves.
Eye protection : Safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Mixture contains one or more component(s) which have the following colour(s):
Colourless Pure substance: white Unpurified: coloured Yellow Colourless to light yellow White
Odour : There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
Mixture contains one or more component(s) which have the following odour(s):
Odourless Aromatic odour Mild odour Alcohol odour Amine-like odour Rotten egg smell
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available
Flash point : > 100 °F

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Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: ≈ 11.1 lb/gal
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: Not oxidising.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

poly(dimethylsiloxane) (9016-00-6)	
LD50 oral rat	> 5000 mg/kg (Rat, Literature study)
titanium(IV) oxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	> 6.8 mg/l/4h (Rat; Experimental value)
butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
LD50 oral rat	2463 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male/female, Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value)
ATE US (oral)	2463.000 mg/kg bodyweight
3-aminopropyltrimethoxysilane (13822-56-5)	
LD50 oral rat	2.970 ml/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value)
LD50 dermal rabbit	11.3 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value)
LC50 inhalation rat (ppm)	> 5 ppm (OECD 403: Acute Inhalation Toxicity, 6 h, Rat, Male, Read-across)

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silica, pyrogenic (112945-52-5)	
LD50 oral rat	3160 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	3160.000 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

titanium(IV) oxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

Specific target organ toxicity (repeated exposure)	: Not classified
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Aspiration hazard	: Not classified
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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poly(dimethylsiloxane) (9016-00-6)	
LC50 fish 1	> 10000 mg/l (96 h, Salmo gairdneri, Static system, Literature study)

titanium(IV) oxide (13463-67-7)	
EC50 Daphnia 1	> 100 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; Daphnia magna; Static system; Fresh water; Weight of evidence)
Threshold limit algae 1	61 mg/l (EC50; Other; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)

butan-2-one O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)	
LC50 fish 1	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Read-across)
EC50 Daphnia 1	201 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Read-across)

3-aminopropyltrimethoxysilane (13822-56-5)	
LC50 fish 1	> 934 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Read-across)
EC50 Daphnia 1	331 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Read-across)

12.2. Persistence and degradability

poly(dimethylsiloxane) (9016-00-6)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.

titanium(IV) oxide (13463-67-7)	
Persistence and degradability	Biodegradability: not applicable. Low potential for mobility in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

butan-2-one O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)	
Persistence and degradability	Not readily biodegradable in water.

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3-aminopropyltrimethoxysilane (13822-56-5)

Persistence and degradability : Not readily biodegradable in water.

silica, pyrogenic (112945-52-5)

Persistence and degradability : Biodegradability: not applicable.

Biochemical oxygen demand (BOD) : Not applicable

Chemical oxygen demand (COD) : Not applicable

ThOD : Not applicable

BOD (% of ThOD) : Not applicable

12.3. Bioaccumulative potential

poly(dimethylsiloxane) (9016-00-6)

BCF fish 1 : 2.9 - 1250 (3 day(s), Hypophthalmichthys molitrix, Literature study)

Bioaccumulative potential : No straightforward conclusion can be drawn based upon the available numerical values.

titanium(IV) oxide (13463-67-7)

Bioaccumulative potential : Not bioaccumulative.

butan-2-one O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)

BCF fish 1 : 0.5 - 5.8 (6 week(s), Cyprinus carpio, Flow-through system, Read-across)

Log Pow : 9.83 (Calculated, KOWWIN)

Bioaccumulative potential : Low potential for bioaccumulation (BCF < 500).

3-aminopropyltrimethoxysilane (13822-56-5)

Log Pow : 0.2 (QSAR, 20 °C)

Bioaccumulative potential : Low potential for bioaccumulation (Log Kow < 4).

silica, pyrogenic (112945-52-5)

Bioaccumulative potential : Not bioaccumulative.

12.4. Mobility in soil

poly(dimethylsiloxane) (9016-00-6)

Ecology - soil : Adsorbs into the soil. Low potential for mobility in soil. Not toxic to plants.

butan-2-one O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)

Log Koc : 5.481 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Ecology - soil : Low potential for mobility in soil.

3-aminopropyltrimethoxysilane (13822-56-5)

Ecology - soil : No (test)data on mobility of the substance available.

12.5. Other adverse effects

Effect on ozone layer :

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT

Transport document description : DOT 49 CFR 173.150 SUB.PAR.F. Unregulated

UN-No.(DOT) : DOT 49 CFR 173.150 SUB.PAR.F. Unregulated

DOT Packaging Exceptions (49 CFR 173.xxx) : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated

DOT Packaging Bulk (49 CFR 173.xxx) : Unregulated when shipped in non-bulk containers

Additional information

Other information : No supplementary information available.

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ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

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Not subject to reporting requirements of the United States SARA Section 313
Listed on the United States TSCA (Toxic Substances Control Act) inventory

poly(dimethylsiloxane) (9016-00-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

titanium(IV) oxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

3-aminopropyltrimethoxysilane (13822-56-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

silica, pyrogenic (112945-52-5)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Not classified

15.2.2. National regulations

titanium(IV) oxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

titanium(IV) oxide (13463-67-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Full text of H-phrases:

Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 4	Flammable liquids, Category 4
H227	Combustible liquid
H351	Suspected of causing cancer

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SDS US (GHS HazCom 2012)

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