

Product name: TEGO® Therm HPG 4000

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended by Commission Regulation (EU) 2020/878

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

1.1 Product identifier

Product name:
TEGO® Therm HPG 4000

Assessment Nanomaterial/Nanoform: This substance/ mixture contains nanoforms (as per the REACH Regulation).

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

Identified uses: Thermal insulation material
Thermal insulation granulate

Uses advised against: Not determined.

1.3 Details of the supplier of the safety data sheet

Company Name : Evonik Operations GmbH
Rellinghauser Str. 1-11
45128 Essen
Germany
Telephone : +49 6181 59 4787
E-mail : sds-hu@evonik.com

1.4 Emergency telephone number:

24-Hour Health Emergency : +49 7623 919191

National Poisons Information Centre: +353 1 809 2166 (general public), +353 1 809 2566 (healthcare professionals)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

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

Health Hazards

Specific Target Organ Toxicity - Repeated Exposure	Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
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2.2 Label Elements

Product name: TEGO® Therm HPG 4000


	Signal Words:	Warning
	Hazard Statement(s):	H373: May cause damage to organs through prolonged or repeated exposure.
Precautionary Statements		
	Prevention:	P260: Do not breathe dust/fume/gas/mist/vapors/spray.
	Response:	P314: Get medical advice/attention if you feel unwell.
	Disposal:	P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazardous ingredients which must be listed on the label:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica

Supplemental label information

EUH066: Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

The proportion of crystalline silicic acids in synthetic amorphous in silicon carbide is distinctly lower than the measureable content of SiO₂. The proportion of silicic acids in synthetic amorphous silicon dioxide is below the detection limit of 0.05 weight percentages.

PBT/vPvB data

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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
3.2 Mixtures

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Silanamine,	70 - <90%	68909-20-6	272-697-1	01-	No data	

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1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica				2119379499-16;	available.	
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* 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).

This substance is listed as SVHC.

Classification

Chemical name	Classification	Notes
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Classification: STOT RE: 2: H373; Supplemental label information: EUH066; Specific concentration limit: None known. Acute toxicity, oral: LD 50: > 5.000 mg/kg Acute toxicity, inhalation: LC 50: > 5,01 mg/l Acute toxicity, dermal: LD 50: > 5.000 mg/kg	None.

CLP: Regulation No. 1272/2008.

The full text for all H-statements is displayed in section 16.

Assessment Nanomaterial/Nanoform: This substance/ mixture contains nanoforms (as per the REACH Regulation).

SECTION 4: First aid measures
4.1 Description of first aid measures
General information:

Pay attention to self-protection. Remove victims from hazardous area. Immediately remove soiled or soaked clothing and remove it to a safe distance. Keep victim warm, in a stabilized position and covered. Do not leave the victim unattended. Place patients who are unconscious but breathing in the stabilized lateral position.

Inhalation:

In case product dust is released: Possible discomfort: cough, sneezing Move to fresh air.

Skin Contact:

Wash off with plenty of water and soap.

Eye contact:

Possible discomfort is due to foreign substance effect. Rinse thoroughly with plenty of water keeping eyelid open. In case of persistent discomfort: Consult an ophthalmologist.

Ingestion:

Clean mouth with water and drink afterwards plenty of water. After absorbing large amounts of substance / In case of discomfort: Supply with medical care.

Personal Protection for First-aid Responders:

No data available.

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4.2 Most important symptoms and effects, both acute and delayed

Symptoms: None known.

Hazards: None known.

4.3 Indication of immediate medical attention and special treatment needed

Treatment: No hazards which require special first aid measures.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray, foam, CO₂, dry powder. Adapt fire-extinguishing measures to surroundings

Unsuitable extinguishing media: Do not use full-force water jet in order to avoid dispersal and spread of the fire.

5.2 Special hazards arising from the substance or mixture: May be released in case of fire: carbon monoxide, carbon dioxide, silica

5.3 Advice for firefighters

Special fire fighting procedures: Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters: In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: For personal protection see section 8. Avoid dust formation.

6.1.1 For non-emergency personnel: No data available.

6.1.2 For emergency responders: No data available.

6.2 Environmental Precautions: Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

6.3 Methods and material for containment and cleaning up: Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4 Reference to other sections: For personal protection see section 8. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Product name: TEGO® Therm HPG 4000

Technical measures:	Provide suitable extraction/ventilation at processing machines.If necessary: Local ventilation.
Local/Total ventilation:	No data available.
Safe handling advice:	Handle in accordance with good industrial hygiene and safety practice. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.If necessary: Local ventilation.
Contact avoidance measures:	No data available.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage conditions:	Keep in a dry place.Take precautionary measures against static discharges.
Safe packaging materials:	No data available.

7.3 Specific end use(s): Applications; see Section 1. No further information available

SECTION 8: Exposure controls/personal protection
8.1 Control Parameters
Occupational Exposure Limits

Chemical name	Type	Form of exposure	Exposure Limit Values		Source
silicon carbide	TWA	Respirable dust.		3 mg/m3	ELV (IE) (2018)
	TWA	Fiber.		0,1 fibers/cm3	ELV (IE) (01 2020)
	TWA	Total inhalable dust.		10 mg/m3	ELV (IE) (01 2020)
Silicon dioxide, chemically prepared (CAS 112945-52-5 resp. 7631-86-9)	TWA	Respirable dust.		3 mg/m3	ELV (IE) (01 2020)
	TWA	Total inhalable dust.		6 mg/m3	ELV (IE) (01 2020)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
silicon carbide	General population	Oral	Systemic, short-term; 13 mg/kg	Acute toxicity
	General population	Dermal	Systemic, short-term; 200 mg/kg	Acute toxicity

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	Workers	Inhalation	Systemic, short-term; 94 mg/m ³	Acute toxicity
	General population	Inhalation	Systemic, short-term; 23 mg/m ³	Acute toxicity
	Workers	Eyes	Local effect;	No hazard identified
	General population	Eyes	Local effect;	No hazard identified

8.2 Exposure controls
Appropriate Engineering Controls:

Provide suitable extraction/ventilation at processing machines. If necessary: Local ventilation. see also section 7.

Individual protection measures, such as personal protective equipment
Eye/face protection:

Safety glasses with side shields If dust occurs: basket-shaped glasses

Hand Protection:

 Additional Information: Wear protective gloves made of the following materials: material, rubber, leather.
 Additional Information: The data about break through time/strength of material is not valid for undissolved solids/dust.

Skin and Body Protection:

No special protective equipment required.

Respiratory Protection:

No special protective equipment required. If dust occurs: Dust mask with P2 particle filter

Hygiene measures:

When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. To ensure ideal skin protection: use super fatted soaps and skin cream for skin care. Wash contaminated clothing before reuse.

Environmental Controls:

see section 6.

SECTION 9: Physical and chemical properties
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9.1 Information on basic physical and chemical properties
Appearance
Physical state:

solid

Form:

Powder Granules

Color:

Gray

Odor:

Odorless

Odor Threshold:

Not applicable

Melting Point:

Not applicable Decomposition

Boiling Point:

Not applicable Decomposition

Flammability:

not flammable

Upper/lower limit on flammability or explosive limits
Explosive limit - upper:

see Explosiveness

Explosive limit - lower:

see Explosiveness

Flash Point:

Not applicable (solid)

Auto-ignition temperature:

Not applicable

Decomposition Temperature:

> 300 °C

pH:

Approximate

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Viscosity

Dynamic viscosity:	Not applicable (solid)
Kinematic viscosity:	Not applicable (solid)
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	hardly soluble
Solubility (other):	No data available.
Dissolution Rate:	low dissolution kinetics

Partition coefficient (n-octanol/water): Not applicable

Dispersion Stability: Assessment: low dispersion stability

Vapor pressure: Not applicable

Relative density: No data available.

Density: No data available.

Bulk density: 50 - 500 kg/m³
Vapor density (air=1): No data available.

Particle characteristics
Particle Size: See comment under the next heading.

Particle Size Distribution: The structure of Evonik synthetic amorphous silica (SAS) can be characterized by constituent particles, which are covalently bound together to aggregates. Due to the covalent bonding there are no phase boundaries between the constituent particles, they have lost their physical identity and thus can be regarded as primary structures only. Aggregates further combine more loosely to agglomerates. The agglomerates are the particles that can be found in the product as it is brought to the market. Size of primary structures: Primary structures can be measured by TEM only. The size for Evonik SAS is in the range of 2.5 – 50 nm (d₅₀, number based). As explained above these do not occur as isolated particles.

Dustiness: Avoid dust formation.

Specific surface area: No data available.

Surface charge/Zeta potential: No data available.

Assessment: Assessment: This substance/ mixture contains nanoforms (as per the REACH Regulation).

Shape: Shape: spheroidal

Crystallinity: Crystallinity: amorphous

Surface treatment: Properties of Coated Particle: hydrophobic
 Surface treatment /Coatings: Yes

9.2 Other information
Oxidizing properties: not oxidizing

Pyrophoric properties: not pyrophoric

Self-heating: Not applicable

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Peroxides:	Not applicable
Dust explosion properties:	Not dust explosive
Evaporation Rate:	Not applicable
Minimum ignition energy:	does not ignite

SECTION 10: Stability and reactivity

10.1 Reactivity:	No dangerous reaction known under conditions of normal use.
10.2 Chemical Stability:	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions:	No hazardous reactions are known if properly handled and stored.
10.4 Conditions to avoid:	Hydrophobic properties disappear at temperatures > 300°C
10.5 Incompatible Materials:	None known.
10.6 Hazardous Decomposition Products:	Carbon Monoxide. Carbon Dioxide. organic products of decomposition Stable under normal conditions. Product will not undergo hazardous polymerization.

SECTION 11: Toxicological information
11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Information on likely routes of exposure

Inhalation:	Information on effects are given below.
Skin Contact:	Information on effects are given below.
Eye contact:	Information on effects are given below.
Ingestion:	Information on effects are given below.

Acute toxicity (list all possible routes of exposure)
Oral

Product: Acute toxicity estimate, > 5.000 mg/kg, Calculation method, Based on available data, the classification criteria are not met.
 Not classified for acute toxicity based on available data.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica LD 50, Rat, Female, Male, > 5.000 mg/kg, OECD 401, (analogy)

Dermal

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

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica LD 50, Rabbit, > 5.000 mg/kg, (analogy)

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Inhalation**Product:** Not classified for acute toxicity based on available data.**Components:**Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica LC 50, Rat, Female, Male, 4 h, > 5,01 mg/l, Dust and mist, OECD 436, (analogy)
Vapour, Not toxic after single exposure, Not applicable**Repeated dose toxicity****Product:** Repeated exposure may cause skin dryness or cracking.**Components:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica NOAEL Rat, Male, Oral, 28 day, 7 days a week, >= 1.000 mg/kg, No negative effects. (analogy)

Skin Corrosion/Irritation**Product:** Based on available data, the classification criteria are not met.**Components:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica Not irritating, OECD 404, Rabbit, (analogy)

Serious Eye Damage/Eye Irritation**Product:** Based on available data, the classification criteria are not met.**Components:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica Not irritating, analogous OECD method, Rabbit, (analogy)

Respiratory or Skin Sensitization**Product:** None known.**Components:**Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica Local Lymph Node Assay (LLNA), OECD 429, Mouse, Not a skin sensitizer., (analogy)
Maximization Test, OECD 406, Guinea Pig, Not a skin sensitizer., (analogy)**Carcinogenicity****Product:** No data available.**Components:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica No evidence that cancer may be caused.

Germ Cell Mutagenicity

no evidence of mutagenic effects

In vitro**Product:** No data available.**Components:**Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica gene mutation test, OECD 471: , negative, (analogy)
gene mutation test, OECD 490: , negative, (analogy)
Chromosomal aberration, OECD 473: , negative, (analogy)

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In vivo**Product:** No data available.**Components:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica Chromosomal aberration, OECD 475, Oral, Rat, Male, negative, (analogy)

Reproductive toxicity**Product:** No data available.**Components:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica no evidence of reproductiontoxic properties

Specific Target Organ Toxicity - Single Exposure**Product:** No data available.**Components:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica no evidence for hazardous properties

Specific Target Organ Toxicity - Repeated Exposure**Product:** Inhalation, Lung, May cause damage to organs through prolonged or repeated exposure.**Components:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica Inhalation - dust and mist, Lung, Category 2, May cause damage to organs through prolonged or repeated exposure. EU-CLP as per Regulation (EU) No. 1272/2008, Annex VI

Aspiration Hazard**Product:** Not classified**Components:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica Not applicable

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:**

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica No data available.

Other information**Product:** The properties of this product which are hazardous to health have been calculated as per regulation (EC) No. 1272/2008. See section 2 "Hazards Identification".;

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SECTION 12: Ecological information

12.1 Toxicity:

Acute hazards to the aquatic environment:

Fish

Product: Figure relates to the main component
 LC 50, Brachydanio rerio (zebrafish), 96 h, > 1.000 mg/l OECD 203, The reported toxic effects relate to the nominal concentration.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica
 LC 50, (Brachydanio rerio), 96 h, > 10.000 mg/l OECD 203, The reported toxic effects relate to the nominal concentration. (analogy)

Aquatic Invertebrates

Product: Figure relates to the main component
 EC 50, Daphnia magna, 48 h, > 100 mg/l OECD 202, The reported toxic effects relate to the nominal concentration.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica
 EC 50, Daphnia magna, 24 h, > 1.000 mg/l OECD 202, The reported toxic effects relate to the nominal concentration. (analogy)

Toxicity to Aquatic Plants

Product: No data available.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica
 EC 50 (Desmodesmus subspicatus (green algae), 72 h): > 173 mg/l (OECD 201) (analogy)

Toxicity to microorganisms

Product: Figure relates to the main component
 EC 50, activated sludge, > 1.000 mg/l, OECD 209, The reported toxic effects relate to the nominal concentration.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica
 EC 50, local activated sludge, 3 h, > 2.500 mg/l, OECD 209, (analogy)

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica
 No data available.

Product name: TEGO® Therm HPG 4000

silica

Aquatic Invertebrates

Product: No data available.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica No data available.

Toxicity to microorganisms

Product: Figure relates to the main component
 EC 50, activated sludge, > 1.000 mg/l, OECD 209, The reported toxic effects relate to the nominal concentration.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica EC 50, local activated sludge, 3 h, > 2.500 mg/l, OECD 209, (analogy)

12.2 Persistence and Degradability
Biodegradation

Product: The methods designed to assess persistence and biodegradability are not applicable to this product, in analogy to inorganic substances.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica The methods designed to assess persistence and biodegradability are not applicable to this product, in analogy to inorganic substances.

12.3 Bioaccumulative potential
Bioconcentration Factor (BCF)

Product: Not to be expected.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica Not to be expected.

Partition Coefficient n-octanol / water (log Kow)

Product: Not applicable

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica , Not applicable

12.4 Mobility in soil:

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Product No remarkable mobility in soil is to be expected.

Components:

Silanamine, 1,1,1-trimethyl-No remarkable mobility in soil is to be expected.
N-(trimethylsilyl)-, hydrolysis
products with silica

12.5 Results of PBT and vPvB assessment:

Product This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

Silanamine, 1,1,1-trimethyl- Non-classified vPvB substance,
N-(trimethylsilyl)-, hydrolysisNon-classified PBT substance
products with silica

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:

Silanamine, 1,1,1-trimethyl-No data available.
N-(trimethylsilyl)-, hydrolysis
products with silica

12.7 Other adverse effects:

Other hazards

Product: An Expert Judgment stated that no classification is necessary based on present knowledge.

Additional Information: No ecotoxicological data is available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: No data available.

Disposal methods: No waste key number as per the European Waste Types List can be assigned to this product, since such classification is based on the (as yet undetermined) use to which the product is put by the consumer. Review all local, state and federal regulations concerning health and pollution for appropriate disposal procedures. The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority. Waste must be disposed of in accordance with federal, state, provincial and local regulations.

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Contaminated Packaging: Offer rinsed packaging material to local recycling facilities.
 Other countries: observe the national regulations.
 Uncontaminated packaging may be recycled. Disposal according to local authority regulations.

SECTION 14: Transport information

14.1 UN/ID No.

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

EU Regulations

EU. REACH Annex XIV, Substances Subject to Authorization: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended: None present or none present in regulated quantities.

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): None present or none present in regulated quantities.

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

Chemical name	CAS-No.	Entry No:
silicon carbide	409-21-2	28

Product name: TEGO® Therm HPG 4000
Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.:

Chemical name	CAS-No.	Concentration
silicon carbide	409-21-2	20 - 30%

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I: Not applicable
EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:

Chemical name	CAS-No.	Concentration
silicon carbide	409-21-2	20 - 30%

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS-No.	Concentration
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	80 - 90%
silicon carbide	409-21-2	20 - 30%

15.2 Chemical safety assessment: No chemical safety assessment is required for this product.

International regulations
Montreal protocol
Ozone Depletion Potential:

silicon carbide No data available. No data available.

Stockholm convention

silicon carbide No data available. Not applicable

Rotterdam convention

silicon carbide No data available.

Kyoto protocol

silicon carbide Not applicable

SECTION 16: Other information
Abbreviations and acronyms:

IR_OEL: Ireland. OELVs, Schedule 1 (Code of Practice for Chemical Agents Regulations), as amended

IR_OEL / TWA: Time Weighted Average (TWA):

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation

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Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data: No data available.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 as amended.	Classification procedure
Specific Target Organ Toxicity - Repeated Exposure, Category 2	On basis of test data

Wording of the H-statements in section 2 and 3

H373	May cause damage to organs through prolonged or repeated exposure.
EUH066	Repeated exposure may cause skin dryness or cracking.

Training information: No data available.

Revision Information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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