

## SAFETY DATA SHEET

#### **DOW EUROPE GMBH**

Safety Data Sheet according to Reg. (EU) No 2015/830

**Product name: XIAMETER™ CTG-1890 Protective Coating**Revision Date: 2018/08/29

Gray Version: 2.0

Date of last issue: 2018/08/28

Print Date: 2018/08/30

DOW EUROPE GMBH encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: XIAMETER™ CTG-1890 Protective Coating Gray

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

Identified uses: Construction materials and additives

1.3 Details of the supplier of the safety data sheet COMPANY IDENTIFICATION

DOW EUROPE GMBH BACHTOBELSTRASSE 3 8810 HORGEN SWITZERLAND

Customer Information Number: 31 115 67 2626

SDSQuestion@dow.com

1.4 EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:** 00 41 447 28 2820 **Local Emergency Contact:** + 46 / 418 450 490 **Danish Emergency Center:** +45 82 12 12 12

## SECTION 2: HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Flammable liquids - Category 2 - H225 Skin irritation - Category 2 - H315

Specific target organ toxicity - single exposure - Category 3 - H336

Long-term (chronic) aquatic hazard - Category 2 - H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

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#### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008:

## **Hazard pictograms**







Signal word: DANGER

#### **Hazard statements**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

## **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P261 Avoid breathing spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P391 Collect spillage.

**Contains** Solvent naphtha (petroleum), light aliph.; Distillates (petroleum), light distillate

hydrotreating process, low-boiling; Low boiling point hydrogen treated naphtha

#### 2.3 Other hazards

Static-accumulating flammable liquid.

This product contains dodecamethylcyclohexasiloxane (D6) that has been identified by the Member State Committee of ECHA as fulfilling the vPvB criteria laid down in Annex XIII to Regulation (EC) No 1907/2006. See Section 12 for additional information.

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical nature: Silicone in solvent

3.2 Mixtures

This product is a mixture.

	CASRN / EC-No. /	REACH Registration	Concentration	Component	Classification: REGULATION (EC) No
L	Index-No.	Number			1272/2008

CASRN 68410-97-9 EC-No. 270-093-2 Index-No.	_	>= 27,0 - <= 41,0 %	(petroleum), light distillate hydrotreating process, low-	Flam. Liq 2 - H225 Skin Irrit 2 - H315 STOT SE - 3 - H336 Asp. Tox 1 - H304 Aquatic Chronic - 2 - H411
649-332-00-3			boiling; Low boiling point hydrogen treated naphtha	
CASRN 64742-89-8 EC-No. 265-192-2 Index-No. 649-267-00-0	1	>= 27,0 - <= 41,0 %	Solvent naphtha (petroleum), light aliph.	Flam. Liq 2 - H225 Skin Irrit 2 - H315 STOT SE - 3 - H336 Asp. Tox 1 - H304 Aquatic Chronic - 2 - H411
CASRN 111-65-9 EC-No. 203-892-1 Index-No. 601-009-00-8	_	>= 0,46 - <= 0,55 %	n-octane	Flam. Liq 2 - H225 Skin Irrit 2 - H315 STOT SE - 3 - H336 Asp. Tox 1 - H304 Aquatic Acute - 1 - H400 Aquatic Chronic - 1 - H410
PBT and vPvB	substance		T	1
CASRN 540-97-6 EC-No. 208-762-8 Index-No.	_	>= 0,53 - <= 0,61 %	Dodecamethyl cyclohexasiloxane	Not classified

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### Note

Solvent naphtha (petroleum), light aliph.:

The classification as a carcinogen or mutagen need not to apply because the substance contains less than 0.1% w/w benzene (EINECS No 200-753-7). Note P of Annex VI to Regulation (EC) 1272/2008.

## **SECTION 4: FIRST AID MEASURES**

## 4.1 Description of first aid measures General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

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**Skin contact:** Wash off with plenty of water. Suitable emergency safety shower facility should be available in work area.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion: No emergency medical treatment necessary.

## 4.2 Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

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

**Notes to physician:** Maintain adequate ventilation and oxygenation of the patient. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

#### SECTION 5: FIREFIGHTING MEASURES

## 5.1 Extinguishing media

**Suitable extinguishing media:** Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical

Unsuitable extinguishing media: High volume water jet Do not use direct water stream.

## 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides Silicon oxides

**Unusual Fire and Explosion Hazards:** Flash back possible over considerable distance. Exposure to combustion products may be a hazard to health. Vapours may form explosive mixtures with air.

## 5.3 Advice for firefighters

**Fire Fighting Procedures:** Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Do not use a solid water stream as it may scatter and spread fire.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

**Special protective equipment for firefighters:** In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

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## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures:** Remove all sources of ignition. Ventilate the area. Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

- **6.2 Environmental precautions:** Do not release the product to the aquatic environment above defined regulatory levels. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
- **6.3 Methods and materials for containment and cleaning up:** Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapours/mists with a water spray jet. Clean up remaining materials from spill with suitable absorbant. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

#### 6.4 Reference to other sections:

See sections: 7, 8, 11, 12 and 13.

## **SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:** Do not get on skin or clothing. Do not breathe vapours or spray mist. Do not swallow. Avoid contact with eyes. Keep container tightly closed. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment. Non-sparking tools should be used. Handle in accordance with good industrial hygiene and safety practice.

Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation. Ensure all equipment is electrically grounded before beginning transfer operations. This material can accumulate static charge due to its inherent physical properties and can therefore cause an electrical ignition source to vapors. In order to prevent a fire hazard, as bonding and grounding may be insufficient to remove static electricity, it isnecessary to provide an inert gas purge before beginning transfer operations. Restrict flow velocity in order to reduce the accumulation of static electricity. Ground and bond container and receiving equipment.

**7.2 Conditions for safe storage, including any incompatibilities:** Keep in properly labelled containers. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition.

Do not store with the following product types: Strong oxidizing agents. Organic peroxides. Flammable solids. Pyrophoric liquids. Pyrophoric solids. Self-heating substances and mixtures. Substances and mixtures, which in contact with water, emit flammable gases. Explosives. Gases. Unsuitable materials for containers: None known.

7.3 Specific end use(s): See the technical data sheet on this product for further information.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1 Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value/Notation
The state of the s		,, <u> </u>	
Solvent naphtha (petroleum),	Dow IHG	TWA	100 ppm
light aliph.			
	Dow IHG	STEL	125 ppm
n-octane	ACGIH	TWA	300 ppm
	DK OEL	GV	935 mg/m3 200 ppm

Although some of the components of this product may have exposure guidelines, no exposure would be expected under normal handling conditions due to the physical state of the material.

## **Derived No Effect Level**

n-octane

## Workers

Acute systemic effects		Acute loc	al effects	Long-term systemic effects		Long-term local effects	
Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation
n.a.	n.a.	n.a.	n.a.	773 mg/kg	2035	n.a.	n.a.
				bw/day	mg/m3		

#### **Consumers**

Acute systemic effects		Acute lo	cal effects	Long-term systemic effects		Long-term local effects			
Dermal	Inhalation	Oral	Dermal	Inhalation	Dermal	Inhalation	Oral	Dermal	Inhalation
n.a.	n.a.	n.a.	n.a.	n.a.	699	608	699	n.a.	n.a.
					mg/kg	mg/m3	mg/kg		
					bw/day		bw/day		

## Dodecamethyl cyclohexasiloxane

### **Workers**

Acute systemic effects		Acute lo	cal effects	Long-term systemic effects		Long-term local effects	
Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation
n.a.	n.a.	n.a.	6,1 mg/m3	n.a.	11 mg/m3	n.a.	1,22 mg/m3

## **Consumers**

Acute systemic effects			Acute loc	cal effects	Long-term systemic effects			Long-term local effects	
Dermal	Inhalation	Oral	Dermal	Inhalation	Dermal	Inhalation	Oral	Dermal	Inhalation
n.a.	n.a.	1,7 mg/kg	n.a.	1,5 mg/m3	n.a.	2,7 mg/m3	1,7 mg/kg	n.a.	0,3 mg/m3
		bw/day					bw/day		

#### **Predicted No Effect Concentration**

n-octane

Compartment	PNEC
Fresh water	0,01 mg/l
Marine water	0,01 mg/l
Intermittent use/release	0,04 mg/l
Sewage treatment plant	0,16 mg/l
Fresh water sediment	4 mg/kg
Marine sediment	4 mg/kg
Soil	1,6 mg/kg

#### Dodecamethyl cyclohexasiloxane

Compartment	PNEC
Fresh water sediment	2,826 mg/kg
Marine sediment	0,282 mg/kg
Soil	3,336 mg/kg
Sewage treatment plant	> 1,0 mg/l

#### 8.2 Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

### Individual protection measures

**Eye/face protection:** Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent. If exposure causes eye discomfort, use a full-face respirator (meeting standard EN 136) with organic vapor cartridge (meeting standard EN 14387).

## Skin protection

Hand protection: Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical substance as this level of protection is also highly dependent on the specific composition of the material that the glove is fabricated from. The thickness of the glove must, depending on model and type of material, generally be more than 0.35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0.35 mm. Other glove materials with a thickness of less than 0.35 mm may offer sufficient protection when only brief contact is expected. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture

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protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. **Other protection:** Use protective clothing chemically resistant to this material.

Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2 (meeting standard EN 14387).

## **Environmental exposure controls**

See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

**Appearance** 

Physical state viscous liquid

Color grey

Odor acetic acid

**Odor Threshold** No data available No data available Hq Melting point/range No data available Freezing point No data available

Boiling point (760 mmHg) > 100 °C

Pensky-Martens closed cup 17,7 °C Flash point

**Evaporation Rate (Butyl Acetate** No data available

= 1)

Flammability (solid, gas) Not applicable Lower explosion limit No data available **Upper explosion limit** No data available **Vapor Pressure** No data available Relative Vapor Density (air = 1) No data available

Relative Density (water = 1) 0.908

Water solubility No data available Partition coefficient: n-No data available

octanol/water

Auto-ignition temperature No data available **Decomposition temperature** No data available

**Dynamic Viscosity** 400 poise

**Kinematic Viscosity** No data available

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**Explosive properties** Not explosive

Oxidizing properties The substance or mixture is not classified as oxidizing.

9.2 Other information

Molecular weightNo data availableParticle sizeNot applicable

NOTE: The physical data presented above are typical values and should not be construed as a specification.

#### SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity: Not classified as a reactivity hazard.
- **10.2 Chemical stability:** Stable under normal conditions.
- **10.3 Possibility of hazardous reactions:** Can react with strong oxidizing agents. When heated to temperatures above 150 °C (300 °F) in the presence of air, trace quantities of formaldehyde may be released. Adequate ventilation is required. Vapours may form explosive mixture with air. Highly flammable liquid and vapour.
- 10.4 Conditions to avoid: Heat, flames and sparks.
- 10.5 Incompatible materials: Oxidizing agents
- **10.6 Hazardous decomposition products:** Formaldehyde.

## SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

## 11.1 Information on toxicological effects Acute toxicity

### **Acute oral toxicity**

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s): LD50, Rat, > 5 000 mg/kg Estimated.

## Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

Based on information for component(s): LD50, Rabbit, > 2 000 mg/kg Estimated.

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#### Acute inhalation toxicity

Brief exposure (minutes) is not likely to cause adverse effects. Vapor from heated material or mist may cause respiratory irritation. May cause central nervous system effects. May cause nausea and vomiting. Symptoms may include headache, dizziness and drowsiness. progressing to incoordination and unconsciousness.

As product: The LC50 has not been determined.

#### Skin corrosion/irritation

Brief contact may cause moderate skin irritation with local redness.

Repeated contact may cause severe skin burns. Symptoms may include pain, severe local redness and tissue damage.

## Serious eye damage/eye irritation

May cause slight eye irritation.

Vapor may cause eye irritation experienced as mild discomfort and redness.

#### Sensitization

For skin sensitization:

Contains component(s) which did not cause allergic skin sensitization in guinea pigs.

For respiratory sensitization:

No relevant information found.

## **Specific Target Organ Systemic Toxicity (Single Exposure)**

Contains component(s) which are classified as specific target organ toxicant, single exposure, category 3.

## Specific Target Organ Systemic Toxicity (Repeated Exposure)

Contains component(s) which have been reported to cause effects on the following organs in animals: Kidney.

Liver.

#### Carcinogenicity

Did not cause cancer in long-term animal studies which used routes of exposure considered relevant to industrial handling. Positiveresults have been reported in other studies using routes of exposure not relevant to industrial handling.

Contains an additional component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

#### **Teratogenicity**

Contains component(s) which, in laboratory animals, have been toxic to the fetus only at doses toxic to the mother. Contains component(s) which did not cause birth defects in laboratory animals.

#### Reproductive toxicity

Contains component(s) which did not interfere with reproduction in animal studies.

#### Mutagenicity

Contains component(s) which were negative in some in vitro genetic toxicity studies and positive in others.

Contains component(s) which were negative in animal genetic toxicity studies.

#### **Aspiration Hazard**

Based on available information, aspiration hazard could not be determined.

#### COMPONENTS INFLUENCING TOXICOLOGY:

## <u>Distillates (petroleum), light distillate hydrotreating process, low-boiling; Low boiling point hydrogen treated naphtha</u>

#### Acute inhalation toxicity

Brief exposure (minutes) is not likely to cause adverse effects. Excessive exposure may cause: Headache. Nausea and/or vomiting. Dizziness.

For similar material(s): LC50, Rat, 4 Hour, vapour, > 5,61 mg/l

## Solvent naphtha (petroleum), light aliph.

## **Acute inhalation toxicity**

LC50, Rat, male and female, 4 Hour, vapour, > 5,61 mg/l No deaths occurred following exposure to a saturated atmosphere.

#### n-octane

## Acute inhalation toxicity

LC50, Rat, male and female, 4 Hour, vapour, > 24,88 mg/l OECD Test Guideline 403 No deaths occurred at this concentration.

## Dodecamethyl cyclohexasiloxane

#### **Acute inhalation toxicity**

The LC50 has not been determined.

#### SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

## 12.1 Toxicity

## <u>Distillates (petroleum), light distillate hydrotreating process, low-boiling; Low boiling point</u> hydrogen treated naphtha

#### Acute toxicity to fish

Material is toxic to aquatic organisms (LC50/EC50/IC50 between 1 and 10 mg/L in the most sensitive species).

LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, 8,2 mg/l

## Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), Immobilization, 48 Hour, 4,5 mg/l

## Acute toxicity to algae/aquatic plants

For similar material(s):

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, 3,1 mg/l, OECD Test Guideline 201

For similar material(s):

NOELR, Pseudokirchneriella subcapitata (green algae), 72 Hour, 0,5 mg/l, OECD Test Guideline 201

## Chronic toxicity to fish

NOELR, Pimephales promelas (fathead minnow), 14 d, 2,6 mg/l, Test substance: Water Accommodated Fraction

## Chronic toxicity to aquatic invertebrates

Based on data from similar materials

NOELR, Daphnia magna (Water flea), 21 d, 2,6 mg/l, Test substance: Water Accommodated Fraction

## Solvent naphtha (petroleum), light aliph.

#### Acute toxicity to fish

Material is toxic to aquatic organisms (LC50/EC50/IC50 between 1 and 10 mg/L in the most sensitive species).

LC50, Pimephales promelas (fathead minnow), semi-static test, 96 Hour, 8,2 mg/l

## Acute toxicity to aquatic invertebrates

EC50, Daphnia magna, static test, 48 Hour, 4,8 mg/l

## Acute toxicity to algae/aquatic plants

ErC50, Selenastrum capricornutum (green algae), static test, 72 Hour, Growth rate, 3,1 mg/l, OECD Test Guideline 201

## Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), 21 d, 2,6 mg/l

#### n-octane

## Acute toxicity to fish

Material is very toxic to aquatic organisms (LC50/EC50/IC50 below 1 mg/L in the most sensitive species).

LC50, Oryzias latipes (Orange-red killifish), 96 Hour, 0,42 mg/l

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 0,3 mg/l, Method Not Specified.

#### Acute toxicity to algae/aguatic plants

Pseudokirchneriella subcapita, 72 Hour, Growth rate, >1,1 mg/l

## Chronic toxicity to aquatic invertebrates

Based on data from similar materials

NOEC, Daphnia magna (Water flea), 21 d, 0,17 mg/l

## **Dodecamethyl cyclohexasiloxane**

#### Acute toxicity to algae/aguatic plants

Not expected to be acutely toxic to aquatic organisms.

No toxicity at the limit of solubility

ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, > 0,002 mg/l

#### Chronic toxicity to aquatic invertebrates

No toxicity at the limit of solubility

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NOEC, Daphnia magna (Water flea), 21 d, 0,0046 mg/l

## 12.2 Persistence and degradability

## Distillates (petroleum), light distillate hydrotreating process, low-boiling; Low boiling point hydrogen treated naphtha

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready

biodegradability. 10-day Window: Pass **Biodegradation:** 77 % Exposure time: 28 d

### Solvent naphtha (petroleum), light aliph.

Biodegradability: No relevant data found.

### n-octane

**Biodegradability:** Material is expected to be readily biodegradable.

**Biodegradation:** > 60 % Exposure time: 20 d Method: Other guidelines

#### Dodecamethyl cyclohexasiloxane

Biodegradability: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

10-day Window: Fail **Biodegradation:** 57 % Exposure time: 28 d

Method: OECD Test Guideline 301B

#### 12.3 Bioaccumulative potential

## Distillates (petroleum), light distillate hydrotreating process, low-boiling; Low boiling point hydrogen treated naphtha

Bioaccumulation: Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and

Partition coefficient: n-octanol/water(log Pow): 5,15

## Solvent naphtha (petroleum), light aliph.

Bioaccumulation: No relevant data found.

#### n-octane

Partition coefficient: n-octanol/water(log Pow): 5,18 No information available.

## Dodecamethyl cyclohexasiloxane

Bioaccumulation: Bioconcentration potential is low (BCF less than 100 or log Pow greater

Partition coefficient: n-octanol/water(log Pow): 8,87

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#### 12.4 Mobility in soil

## <u>Distillates (petroleum), light distillate hydrotreating process, low-boiling; Low boiling point</u> hydrogen treated naphtha

No relevant data found.

## Solvent naphtha (petroleum), light aliph.

No relevant data found.

#### n-octane

No relevant data found.

### Dodecamethyl cyclohexasiloxane

Potential for mobility in soil is very high (Koc between 0 and 50).

#### 12.5 Results of PBT and vPvB assessment

## <u>Distillates (petroleum), light distillate hydrotreating process, low-boiling; Low boiling point hydrogen treated naphtha</u>

This mixture has not been assessed for persistence, bioaccumulation and toxicity (PBT).

## Solvent naphtha (petroleum), light aliph.

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

#### n-octane

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

#### Dodecamethyl cyclohexasiloxane

Dodecamethyl cyclohexasiloxane (D6) meets the current REACh Annex XIII criteria for vPvB. However, D6 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D6 is not biomagnifying in aquatic and terrestrial food webs. D6 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D6 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

## 12.6 Other adverse effects

## <u>Distillates (petroleum), light distillate hydrotreating process, low-boiling; Low boiling point hydrogen treated naphtha</u>

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

#### Solvent naphtha (petroleum), light aliph.

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

## n-octane

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

#### <u>Dodecamethyl cyclohexasiloxane</u>

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

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## **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1 Waste treatment methods

Do not dump into any sewers, on the ground, or into any body of water. This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required.

The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

## **SECTION 14: TRANSPORT INFORMATION**

Classification for ROAD and Rail transport (ADR/RID):

**14.1 UN number** UN 1268

**14.2 UN proper shipping name** PETROLEUM DISTILLATES, N.O.S.

14.3 Transport hazard class(es) 314.4 Packing group ||

**14.5** Environmental hazards Solvent naphtha (petroleum), light aliphatic, Distillates

(petroleum), light distillate hydrotreating process, low-boiling

14.6 Special precautions for user Special Provision 640D

Hazard Identification Number: 33

Classification for SEA transport (IMO-IMDG):

**14.1 UN number** UN 1268

**14.2 UN proper shipping name** PETROLEUM DISTILLATES, N.O.S.

14.3 Transport hazard class(es) 314.4 Packing group ||

**14.5 Environmental hazards** Solvent naphtha (petroleum),light aliphatic, Distillates

(petroleum), light distillate hydrotreating process, low-boiling

14.6 Special precautions for user EmS: F-E, S-E

14.7 Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code

Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

**14.1 UN number** UN 1268

**14.2 UN proper shipping name** Petroleum distillates, n.o.s.

14.3 Transport hazard class(es) 314.4 Packing group ||

**14.5 Environmental hazards** Not applicable

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#### **14.6** Special precautions for user No data available.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## **SECTION 15: REGULATORY INFORMATION**

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

## REACh Regulation (EC) No 1907/2006

This product contains only components that have been either pre-registered, registered, are exempt from registration, are regarded as registered or are not subject to registration according to Regulation (EC) No. 1907/2006 (REACH)., The aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyer's/user's responsibility to ensure that his/her understanding of the regulatory status of this product is correct.

#### **Authorisation status under REACH:**

The following substance/s contained in this product might be or is/are subject to authorization in accordance with REACH:

CAS-No.: 540-97-6 Name: Dodecamethyl cyclohexasiloxane

Authorisation status: listed in the Candidate List of Substances of Very High Concern for Authorisation

Authorisation number: Not available

Sunset date: Not available

Exempted (Categories of) Uses: Not available

## Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Listed in Regulation: FLAMMABLE LIQUIDS

Number in Regulation: P5c

5 000 t 50 000 t

Listed in Regulation: ENVIRONMENTAL HAZARDS

Number in Regulation: E2

200 t 500 t

Listed in Regulation: Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)

Number in Regulation: 34

2 500 t

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25 000 t

#### **Further information**

When evaluating a workplace, measures must be taken to ensure that employees are not exposed to conditions that may pose a risk during pregnancy or breastfeeding (cf. The Danish Working Environment Authority's Executive Order on The Performance of Work)

Young people under the age of 18 are not allowed to use or be exposed to the product professionally. Young people above the age of 15 are, however, except from this rule if the product is a necessary part of their education.

## 15.2 Chemical safety assessment

Not applicable

## **SECTION 16: OTHER INFORMATION**

#### Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

## Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008

Flam. Liq. - 2 - H225 - Based on product data or assessment

Skin Irrit. - 2 - H315 - Calculation method STOT SE - 3 - H336 - Calculation method

Aquatic Chronic - 2 - H411 - Calculation method

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Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

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Legena	
ACGIH	USA. ACGIH Threshold Limit Values (TLV)
DK OEL	Denmark. Occupational Exposure Limits
Dow IHG	Dow Industrial Hygiene Guideline
GV	Long term exposure limit
STEL	Short term exposure limit
TWA	Time weighted average
Aquatic Acute	Short-term (acute) aquatic hazard
Aquatic Chronic	Long-term (chronic) aquatic hazard
Asp. Tox.	Aspiration hazard
Flam. Liq.	Flammable liquids

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Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity - single exposure

#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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; 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 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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

DOW EUROPE GMBH urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have

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obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version. DK

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