Safety Data Sheet

according to UK REACH Regulation

GYEON Q2 CanCoat EVO

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

1.1. Product identifier

GYEON Q2 CanCoat EVO

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

Use of the substance/mixture

Vehicle protective product - ceramic coating designed for paintwork
Enthusiasts and professional use (End consumer)

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	Gyeon Technology
Street:	1405-538, 212, Gasan digital 1-ro
Place:	Geumcheon-gu, Seoul, Korea
Telephone:	+82-10-4339-3599
Contact person:	Robert Gyeon
e-mail:	sales@gyeon.co

Supplier

Company name:	Gyeon UK Ltd
Street:	Commercial Quay, 84 Commercial Stree
Place:	GB-EH6 6LX Edinburgh
e-mail:	hello@gyeonquartz.uk
Contact person:	Richard Cooper Telephone: +44 (0)7984 056790

1.4. Emergency telephone number:

National Poisons Information Service - 03448920111. 'For healthcare professionals only'.

Further Information

Safety Data Sheet according to UK-REACH Regulation

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Flam. Liq. 2; H225
Asp. Tox. 1; H304
STOT RE 2; H373
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Naphtha (petroleum), light alkylate; Low boiling point modified naphtha
Distillates (petroleum), hydro-treated light; Kerosine - unspecified
stoddard solvent; Low boiling point naphtha - unspecified
toluene

Signal word: Danger

Pictograms:



Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

The mixture contains the following substances fulfilling the PBT criteria according to UK REACH: Decamethylcyclopentasiloxane; Hexamethyldisiloxane.
The mixture contains the following substances fulfilling the vPvB criteria according to UK REACH: Decamethylcyclopentasiloxane.
Endocrine disrupting properties: Decamethylcyclopentasiloxane.
This product does not contain a substance (> 0,1 %) that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.
The substance is included in one of the lists of endocrine disruptors (list II (human.)).

In use, may form flammable/explosive vapour-air mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
541-02-6	Decamethylcyclopentasiloxane			30 - < 35 %
	208-764-9			
64741-66-8	Naphtha (petroleum), light alkylate; Low boiling point modified naphtha			10 - < 12 %
	265-068-8	649-276-00-X		
	Asp. Tox. 1; H304			
64742-47-8	Distillates (petroleum), hydro-treated light; Kerosine - unspecified			10 - < 12 %
	265-149-8	649-422-00-2		
	Asp. Tox. 1; H304			
8052-41-3	stoddard solvent; Low boiling point naphtha - unspecified			7 - < 10 %

	232-489-3	649-345-00-4		
	Flam. Liq. 3, STOT RE 1, Asp. Tox. 1, Aquatic Chronic 2; H226 H372 H304 H411			
108-88-3	toluene			1 - < 3 %
	203-625-9	601-021-00-3		
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H361d H315 H336 H373 H304			
107-46-0	Hexamethyldisiloxane			1 - < 3 %
	203-492-7			
	Flam. Liq. 2, Aquatic Acute 1, Aquatic Chronic 2; H225 H400 H411			
546-68-9	Titanium tetraisopropanolate			1 - < 3 %
	208-909-6			
	Flam. Liq. 3, Eye Irrit. 2, STOT SE 3; H226 H319 H336			
1330-20-7	xylene			1 - < 3 %
	215-535-7	601-022-00-9		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315			
25550-14-5	Ethyltoluene			0.3 - < 0.5 %
	247-093-6			
	Flam. Liq. 3, Repr. 2, Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 2; H226 H361f H315 H319 H411			
100-41-4	ethylbenzene			0.2 - < 0.3 %
	202-849-4	601-023-00-4		
	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H225 H332 H373 H304 H412			
67-56-1	methanol			0.1 - < 0.2 %
	200-659-6	603-001-00-X		
	Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370			
98-82-8	cumene			< 0.1 %
	202-704-5	601-024-00-X		
	Flam. Liq. 3, Carc. 1B, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H350 H335 H304 H411			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
541-02-6	208-764-9	Decamethylcyclopentasiloxane	30 - < 35 %
	inhalation: LC50 = 7,3 - 10,32 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		
64742-47-8	265-149-8	Distillates (petroleum), hydro-treated light; Kerosine - unspecified	10 - < 12 %
	inhalation: LC50 = > 5,3 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		
108-88-3	203-625-9	toluene	1 - < 3 %
	inhalation: LC50 = (28,1) mg/l (vapours); dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg		
1330-20-7	215-535-7	xylene	1 - < 3 %
	inhalation: LC50 = (6700) mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = (12126) mg/kg; oral: LD50 = (3523) mg/kg		
100-41-4	202-849-4	ethylbenzene	0.2 - < 0.3 %
	inhalation: LC50 = 17,2 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = >15000 mg/kg; oral: LD50 = 3500 mg/kg		
67-56-1	200-659-6	methanol	0.1 - < 0.2 %

	inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: ATE = 300 mg/kg; oral: ATE = 100 mg/kg STOT SE 1; H370: >= 10 - 100 STOT SE 2; H371: >= 3 - < 10		
98-82-8	202-704-5	cumene	< 0.1 %
	inhalation: LC50 = 39 mg/l (vapours); dermal: LD50 = 12300 mg/kg		

Further Information

- Naphtha (petroleum), light alkylate; Low boiling point modified naphtha (P)
- stoddard solvent; Low boiling point naphtha - unspecified (P)

Note P: The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0.1 % w/w benzene (Einecs No 200-753-7).

This substance has been listed as SVHC (substance of very high concern) in the Candidate List according to Article 59 of REACH.: Decamethylcyclopentasiloxane (CAS: 541-02-6; 20.06.2018)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.
First aider: Pay attention to self-protection!

After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of respiratory tract irritation, consult a physician.

After contact with skin

Take off immediately all contaminated clothing. Wash with plenty of water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

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

Inhalation can cause damage to the respiratory tract or lungs.
May be fatal if swallowed and enters airways.
following inhalation: Headache. spasms. Repeated exposure may cause skin dryness or cracking. Caution if victim vomits: Risk of aspiration!

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

Carbon dioxide (CO2). Dry extinguishing powder. Alcohol resistant foam.
In case of major fire and large quantities: Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide (CO). Carbon dioxide (CO2).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.

For non-emergency personnel

Remove persons to safety. Remove all sources of ignition. Ventilate affected area.
Wear personal protection equipment. (See section 8.)

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Danger of explosion! Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area.
Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations.
Do not breathe gas/vapour/aerosol.Avoid contact with skin, eyes and clothes.
Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.
Flammable vapours can accumulate in head space of closed systems. In use, may form flammable/explosive vapour-air mixture. Heating causes rise in pressure with risk of bursting.

Advice on general occupational hygiene

The usual precautions for handling chemicals should be considered.
Keep away from food, drink and animal feedingstuffs.
Always close containers tightly after the removal of product. Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and after work. Protect skin by using skin protective cream. Take off contaminated clothing and wash it before reuse.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect against direct sunlight.
Ensure adequate ventilation of the storage area.
Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Hints on joint storage

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.
Protect against: UV-radiation/sunlight. heat. Humidity frost.
storage temperature: 15 - 25°C

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
98-82-8	Cumene	25	125		TWA (8 h)	WEL
		50	250		STEL (15 min)	WEL
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
		100	384		STEL (15 min)	WEL
25551-13-7	Trimethylbenzenes: mixed isomers	25	125		TWA (8 h)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift

8.2. Exposure controls





Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation as well as local exhaustion at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Recommended eye protection brand: Tightly sealed safety glasses. (BS/EN 166)

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves.
Suitable material: Butyl rubber.
Thickness of glove material: 0,5 mm
Breakthrough time >= 480 min. Penetration time (maximum wearing period): ~ 120 min. (estimated)
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
The selected protective gloves have to satisfy the specifications of the Personal Protective Equipment at Work (Amendment) Regulations 2022 and the standard EN ISO 374.
Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Wear fire/flame resistant/retardant clothing.
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
Generation/formation of aerosols
Exceeding exposure limit values
Insufficient ventilation
Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type: A/P1-3
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	Petroleum
Odour threshold:	not determined

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	104 °C
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	15 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	not miscible

Solubility in other solvents

not determined

Dissolution rate:	not relevant
Partition coefficient n-octanol/water:	SECTION 12: Ecological information
Dispersion stability:	not relevant
Vapour pressure:	not determined
Density:	0,93 g/cm³
Bulk density:	not determined
Relative vapour density:	not determined
Particle characteristics:	not relevant

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

In use, may form flammable/explosive vapour-air mixture.

Sustaining combustion:	No data available

Self-ignition temperature

Gas:	not determined

Oxidizing properties

none.

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined
Solid content:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Viscosity / dynamic:	not determined
Flow time:	not determined

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.
Refer to chapter 10.5.

10.4. Conditions to avoid

Keep away from heat. Danger of explosion!
In use may form flammable/explosive vapour-air mixture.
Heating causes rise in pressure with risk of bursting.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong. Strong acid. strong alkalis.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) 86956,5 mg/kg; ATE (dermal) 64833,0 mg/kg; ATE (inhalation vapour) 648,33 mg/l; ATE (inhalation dust/mist) 92,593 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
541-02-6	Decamethylcyclopentasiloxane				
	oral	LD50 > 5000 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 > 2000 mg/kg	Rabbit	ECHA Dossier	
	inhalation (4 h) dust/mist	LC50 7,3 - 10,32 mg/l	Rat	ECHA Dossier	
64742-47-8	Distillates (petroleum), hydro-treated light; Kerosine - unspecified				
	oral	LD50 > 5000 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 > 2000 mg/kg	Rabbit.	ECHA Dossier	
	inhalation (4 h) vapour	LC50 > 5,3 mg/l	Rat	ECHA Dossier	
108-88-3	toluene				
	oral	LD50 >5000 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 >5000 mg/kg	Rabbit	ECHA Dossier	
	inhalation (4 h) vapour	LC50 (28,1) mg/l	Rat	ECHA Dossier	
1330-20-7	xylene				
	oral	LD50 (3523) mg/kg	Rat	Study report (1986)	EU Method B.1
	dermal	LD50 (12126) mg/kg	Rabbit	Publication (1962)	Single dermal dose under occlusion follo
	inhalation (4 h) vapour	LC50 (6700) mg/l	Rat	Toxicol Appl Pharmacol 33:543-558. (1975	EU Method B.2
	inhalation dust/mist	ATE 1,5 mg/l			
100-41-4	ethylbenzene				
	oral	LD50 3500 mg/kg	Rat.	ECHA Dossier	
	dermal	LD50 >15000 mg/kg	Rabbit	ECHA Dossier	
	inhalation (4 h) vapour	LC50 17,2 mg/l	Rat.	ECHA Dossier	
	inhalation dust/mist	ATE 1,5 mg/l			
67-56-1	methanol				
	oral	ATE 100 mg/kg			
	dermal	ATE 300 mg/kg			

	inhalation vapour	ATE	3 mg/l			
	inhalation dust/mist	ATE	0,5 mg/l			
98-82-8	cumene					
	dermal	LD50 mg/kg	12300	Rabbit	IUCLID	
	inhalation (4 h) vapour	LC50	39 mg/l	Rat	RTECS	

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
toluene:
In-vitro mutagenicity: Method: OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test); Result: negative. Literature information: ECHA dossier; Carcinogenicity: Method: [inhalative, OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)]; Species: Rat ; Exposure duration: 2 years ; Result: NOAEC = 4522 mg/m3; Literature information: ECHA dossier; Reproductive toxicity: Method: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study); Species: Rat ; Result: NOAEC = 1875 mg/m3; Literature information: ECHA dossier ; Developmental toxicity/teratogenicity: Method: [inhalative, EPA OTS 798.4350 (Inhalation Developmental Toxicity Screen)]; Species: Rabbit; Exposure duration: 20d ; Result: NOEC = 2812 mg/kg; Literature information: ECHA dossier

methanol:
Germ cell mutagenicity: Method: OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test). Species: Mouse.; Result: negative. Literature information: ECHA dossier; Carcinogenicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies). Length of test: 18 m. Species: Mouse.; Result: NOAEC = 1,3 mg/l; Literature information: ECHA dossier; Reproductive toxicity: Method: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study). Species: Rat. Result: NOAEC = 1,3 mg/l; Literature information: ECHA dossier; Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study). Species: Rabbit. Result: NOAEL = 1000 mg/kg.

Distillates (petroleum), hydro-treated light; Kerosine - unspecified:
In vitro mutagenicity/genotoxicity:
Method: OECD Guideline 479 (Genetic Toxicology: In Vitro Sister Chromatid Exchange Assay in Mammalian Cells) , OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test), OECD Guideline 471 (Bacterial Reverse Mutation Assay); Result: negative. Literature information: ECHA dossier
In vivo mutagenicity/genotoxicity:
Method: OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test), OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test); Result: negative.;nLiterature information: ECHA dossier
Reproductive toxicity:
Method:-; Species: Sprague-Dawley Rat; Exposure route : oral; Result: NOAEL > 1500 mg/kg; Literature information: ECHA dossier
Developmental toxicity/teratogenicity:
Method:OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Sprague-Dawley Rat ; Exposure route: oral; Result: NOAEL = 1000 mg/kg; Literature information: ECHA dossier

Xylene:
In-vitro mutagenicity: Method: EU Method B.10 (Mutagenicity - In Vitro Mammalian Chromosome Aberration Test); Result: negative. Literature information: ECHA dossier; Developmental toxicity/teratogenicity : NOAEL >= 500ppm (OECD Guideline 414); Literature information: ECHA dossier; Carcinogenicity: Method: EU Method B.32 (Carcinogenicity Test); Species: Rat.; Exposure duration: 24 months. Result: NOAEL = 500 mg/kg; Literature information: ECHA dossier; Reproductive toxicity: Method: (inhalation.): EPA OPPTS 870.3800 (Reproduction and Fertility Effects); Species: Rat ; Exposure duration: 14d.Results: NOAEC = 500 ppm.

Literature information: ECHA dossier

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (stoddard solvent; Low boiling point naphtha - unspecified)
toluene:
Subchronic oral toxicity: Method: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents);Species: Mouse. ; Exposure duration: 90d;Result: NOEL = 625 mg/kg ; Literature information: ECHA dossier; Subchronic inhalation toxicity: Method: -; Species: Rat. Exposure duration: 1 year ;Result: NOAEC = 1131 mg/m3; Literature information: ECHA dossier

methanol:
Chronic inhalative toxicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies). Length of test: 12 m . Exposure time: 20 h/d. Species: Rat.
Result: Result: NOAEC = 1,3 mg/l. Literature information: ECHA dossier

Distillates (petroleum), hydro-treated light; Kerosine - unspecified:
Subchronic oral toxicity: Method:-; Species: Sprague-Dawley Rat ;Exposure duration: 90d; Result: NOAEL = 750 mg/kg ; Literature information: ECHA dossier; Subchronic inhalation toxicity: Method:OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day); Species: Mouse; Exposure duration: 90d; Result: NOAEC = 1000 mg/kg; Literature information: ECHA dossier; Subchronic oral toxicity: Method: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study); Species: Sprague-Dawley Rat ; Exposure duration: 28d; Result: NOAEC = 0,5 ml/kg; Literature information: ECHA dossier

Xylene:
Subchronic oral toxicity: Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents); Species: Rat ; Exposure duration: 90d. Result: NOAEL = 750 mg/kg (male.) = 150 mg/kg (female.); Literature information: ECHA dossier

Aspiration hazard

May be fatal if swallowed and enters airways.

Specific effects in experiment on an animal

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

Endocrine disrupting properties: Decamethylcyclopentasiloxane.
The substance is included in one of the lists of endocrine disruptors (list II (human.)).

Other information

No data available.

Further information

Solvent
Symptoms: Depression of the central nervous system. Liver and kidney damage. drowsiness. vomiting. Nausea. Dizziness. unconsciousness. Impaired consciousness. Intoxication. erythema (redness)

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
541-02-6	Decamethylcyclopentasiloxane						
	Acute fish toxicity	LC50 mg/l	> 16	96 h	Oncorhynchus mykiss (Rainbow trout)	ECHA Dossier	

	Acute algae toxicity	ErC50	> 12 mg/l		Pseudokirchneriella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EC50	> 2,9 mg/l	48 h	Daphnia magna	ECHA Dossier	
	Fish toxicity	NOEC	16 mg/l	14 d	Oncorhynchus mykiss (Rainbow trout)	ECHA Dossier	
	Algae toxicity	NOEC	> 12 mg/l	4 d	Pseudokirchneriella subcapitata	ECHA Dossier	
64742-47-8	Distillates (petroleum), hydro-treated light; Kerosine - unspecified						
	Acute algae toxicity	ErC50	EL50: 1-3 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EL50	1,4 mg/l	48 h	Daphnia magna	ECHA Dossier	
108-88-3	toluene						
	Acute fish toxicity	LC50	(5,5) mg/l	96 h	Oncorhynchus kisutch	ECHA Dossier	
	Acute algae toxicity	ErC50	(12,5) mg/l	72 h		GESTIS	
	Acute crustacea toxicity	EC50	(3,78) mg/l	48 h	Ceriodaphnia dubia	ECHA Dossier	
	Acute bacteria toxicity	(EC50	134 mg/l)	3 h	Chlorella vulgaris and Chlamydomonas angulosa	ECHA Dossier	
1330-20-7	xylene						
	Acute fish toxicity	LL50	(8,4) mg/l	96 h	Oncorhynchus mykiss	Ecotoxicology and Environmental Safety.	OECD Guideline 203
	Acute algae toxicity	ErC50	(4,9) mg/l	72 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety.	OECD Guideline 201
	Acute crustacea toxicity	EL50	(> 3,4) mg/l	48 h	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	US EPA 600/4-91-003
	Fish toxicity	NOEC	> 1,3 mg/l	56 d	Oncorhynchus mykiss	Appl. Sci. Branch, Eng. Res. Cent. Denve	Fish were exposed in artificial streams
	Crustacea toxicity	NOEC	1,17 mg/l	7 d	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	US EPA 600/4-91-003
	Acute bacteria toxicity	(EC50	> 175 mg/l)	0,5 h	Activated sludge	Research Journal WPCF 60(10) 1850-1856 (	OECD Guideline 209
100-41-4	ethylbenzene						
	Acute fish toxicity	LC50	5,1 mg/l	96 h	Menidia menidia	ECHA Dossier	
	Acute algae toxicity	ErC50	3,6 mg/l	96 h	Pseudokirchnerella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EC50	1,8-2,8 mg/l	48 h	Daphnia magna	ECHA Dossier	
	Crustacea toxicity	NOEC	0,96 mg/l	7 d	Ceriodaphnia dubia	ECHA Dossier	
67-56-1	methanol						
	Acute fish toxicity	LC50	15400 mg/l	96 h	Lepomis macrochirus	ECHA Dossier	

	Acute algae toxicity	ErC50 mg/l	22000	96 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety 7	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna	Water Research 23(4): 495-499 (1989)	DIN 38412 Teil 11
98-82-8	cumene						
	Acute fish toxicity	LC50	2,7 mg/l	96 h	Leuciscus idus		
	Acute algae toxicity	ErC50	2,6 mg/l	72 h	Selenastrum capricornutum		

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
541-02-6	Decamethylcyclopentasiloxane			
	OECD 310	0,14	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
64742-47-8	Distillates (petroleum), hydro-treated light; Kerosine - unspecified			
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	61	28	ECHA Dossier
1330-20-7	xylene			
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	87,8%	28	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D
	Easily biodegradable (concerning to the criteria of the OECD)			
100-41-4	ethylbenzene			
	ISO 14593-CO2-Headspace Test	79	28	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			
67-56-1	methanol			
	other guideline	76%	20	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
541-02-6	Decamethylcyclopentasiloxane	8,023
108-88-3	toluene	2,73
546-68-9	Titanium tetraisopropanolate	0,05
1330-20-7	xylene	3,2
100-41-4	ethylbenzene	3,6
67-56-1	methanol	-0,77
98-82-8	cumene	3,66

BCF

CAS No	Chemical name	BCF	Species	Source
541-02-6	Decamethylcyclopentasiloxane	7060	Pimephales promelas	ECHA
1330-20-7	xylene	5,5 - 12,2	Oncorhynchus mykiss	Appl. Sci. Branch, E
67-56-1	methanol	1	Cyprinus carpio	Comparative Biochemi

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The mixture contains the following substances fulfilling the PBT criteria according to UK REACH: Decamethylcyclopentasiloxane; Hexamethyldisiloxane.
The mixture contains the following substances fulfilling the vPvB criteria according to UK REACH: Decamethylcyclopentasiloxane.
The aforementioned statement applies to substances contained in the product with a minimum content of 0.1 %.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.
The aforementioned statement applies to substances contained in the product with a minimum content of 0.1 %.

12.7. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.
Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (stoddard solvent; Low boiling point naphtha - unspecified, toluene)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Classification code:	F1
Special Provisions:	274 601 640D
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (stoddard solvent; Low boiling point naphtha - unspecified, toluene)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Classification code:	F1
Special Provisions:	274 601 640D
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (stoddard solvent; Low boiling point naphtha - unspecified, toluene)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Marine pollutant:	NO
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (stoddard solvent; Low boiling point naphtha - unspecified, toluene)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Special Provisions:	A3
Limited quantity Passenger:	1 L
Passenger LQ:	Y341
Excepted quantity:	E2
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L

IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

See section 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant.

SECTION 15: Regulatory information

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

EU regulatory information

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):
Decamethylcyclopentasiloxane

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 48, Entry 69, Entry 70, Entry 75

2010/75/EU (VOC):	not determined
2004/42/EC (VOC):	not determined
Information according to 2012/18/EU (SEVESO III):	P5c FLAMMABLE LIQUIDS

Additional information

Safety Data Sheet according to UK-REACH Regulation
The mixture is classified as hazardous according to GHS (GB CLP).
UK REACH Appendix XVII, No (mixture): 3, 40, 48, 69, 70

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Rev. 1,0; 24.08.2021, Initial release
Rev. 2.0; 02.01.2023, Revision Changes in chapter: 2-16

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service
CLP: Classification, Labelling and Packaging of substances and mixtures
DNEL: Derived No Effect Level
d: day(s)
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European LIst of Notified Chemical Substances
ECHA: European Chemicals Agency
EWC: European Waste Catalogue
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
h: hour
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect concentration
NLP: No-Longer Polymers
N/A: not applicable
OECD: Organisation for Economic Co-operation and Development
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
REACH: Registration, Evaluation, Authorisation of Chemicals
SVHC: substance of very high concern
TRGS: Technische Regeln für Gefahrstoffe
UN: United Nations
VOC: Volatile Organic Compounds

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Asp. Tox. 1; H304	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs (...) through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)