

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 19-Aug-2021

Revision date 20-Aug-2024

Revision Number 6

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

1.1. Product identifier

Product Code(s) 12029

Safety data sheet number 12029

Product Name DOWSIL 2202A TEXTILE FINISH

Synonyms DC 2202A TEXTILE FINISH, DOW CORNING 2202A TEXTILE FINISH

Pure substance/mixture Mixture

Contains HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%); TITANIUM TETRABUTANOLATE; XYLENE; 2-METHYLPENTANE-2,4-DIOL; ETHYLBENZENE

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

Recommended use Industrial use
Use in paper, textile and leather production.

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Flammable liquids	Category 3 - (H226)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)

Reproductive toxicity	Category 2 - (H361d)
Specific target organ toxicity — single exposure	Category 3 - (H335, H336)
Category 3 Narcotic effects, Respiratory irritation	
Specific target organ toxicity — repeated exposure	Category 1 - (H372)
Aspiration hazard	Category 1 - (H304)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

Contains HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%); TITANIUM TETRABUTANOLATE; XYLENE; 2-METHYLPENTANE-2,4-DIOL; ETHYLBENZENE



Signal word

Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H361d - Suspected of damaging the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure if inhaled
H411 - Toxic to aquatic life with long lasting effects
H226 - Flammable liquid and vapour

Precautionary statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P260 - Do not breathe mist/vapours/spray
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P331 - Do NOT induce vomiting
P370 + P378 - In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish
P391 - Collect spillage

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

Additional information

This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

Product is a static accumulator.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) -	>= 36.0 - <= 45.0 %	-	-	Aquatic Chronic 2 (H411) Asp. Tox. 1 (H304) Flam. Liq. 3 (H226) STOT RE 1 (H372) STOT SE 3 (H336)	-	-	-
TITANIUM TETRABUTANOLATE 5593-70-4	>= 13.0 - <= 17.0 %	227-006-8	-	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335) STOT SE 3 (H336)	-	-	-
XYLENE 1330-20-7	>= 3.8 - <= 7.6 %	215-535-7 (601-022-00-9)	-	Aquatic Chronic 3 (H412) Asp. Tox. 1 (H304) Flam. Liq. 3 (H226) Acute Tox. 4 (H332) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Acute Tox. 4 (H312) STOT SE 3 (H335)	-	-	-
2-METHYLPENTAN-2,4-DIOL 107-41-5	>= 3.0 - <= 3.6 %	203-489-0 (603-053-00-3)	-	Repr. 2 (H361d) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	-	-	-
ETHYLBENZENE 100-41-4	>= 1.0 - <= 2.3 %	202-849-4 (601-023-00-4)	-	Aquatic Chronic 3 (H412) Asp. Tox. 1 (H304) Acute Tox. 4 (H332) STOT RE 2 (H373) Flam. Liq. 2 (H225)	-	-	-
HEXAMETHYLDISILOXANE 107-46-0	<= 0.3 %	203-492-7	-	Aquatic Chronic 2 (H411) Aquatic Acute 1 (H400) Flam. Liq. 2 (H225)	-	1	-

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59)

SECTION 4: First aid measures**4.1. Description of first aid measures****General advice**

First aid personnel should wear appropriate protective equipment during any rescue. Use personal protection recommended in Section 8.

Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is irregular or stopped, administer artificial respiration. Get medical attention if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Get medical attention if symptoms occur.
Ingestion	Rinse mouth thoroughly with water. Do NOT induce vomiting. Get medical attention if symptoms occur.

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

Symptoms	Suspected of damaging the unborn child.
Inhalation	May cause respiratory irritation. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure if inhaled.
Eyes	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.
Dermal	Causes skin irritation.
Ingestion	May be fatal if swallowed and enters airways

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

Note to doctors	Maintain adequate ventilation and oxygenation of the patient. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. Because rapid absorption may occur through the lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Alcohol consumed before or after exposure may increase adverse effects. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Skin contact may aggravate preexisting dermatitis.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Alcohol resistant foam. Dry sand.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Flammable liquid and vapour. When heated and in case of fire, toxic vapours/gases may be formed. Flash back possible over considerable distance. Exposure to combustion products
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may be a hazard to health. Flammable concentrations of vapour can accumulate at temperatures above flash point; see Section 9. Flammable mixtures may exist within the vapour space of containers at room temperature. Containers can burst violently when heated, due to excess pressure build-up. Vapours may form explosive mixtures with air.

Hazardous combustion products Carbon oxides. Silicon oxides. Metal oxides. Formaldehyde. BUTANOL.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with skin, eyes and inhalation of vapours. Remove all sources of ignition. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Ground and bond container and receiving equipment. Do not allow run-off from fire-fighting to enter drains or water courses. Vapours may form explosive mixtures with air. Follow precautions for safe handling described in this safety data sheet.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Use non-sparking tools. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Suppress (knock down) gases/vapours/mists with a water spray jet. Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with skin, eyes and inhalation of vapours. Do not swallow. Keep container closed when not in use. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Avoid spilling. Avoid release to the environment. Use non-sparking tools. Handle in accordance with good industrial hygiene

and safety practice. Empty containers retain product residue and can be hazardous. Use explosion-proof electrical, ventilating and lighting equipment. 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 is necessary 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.

General hygiene considerations Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep in properly labelled containers. Store locked up. Keep away from open flames, hot surfaces and sources of ignition. Store away from incompatible materials. Strong oxidising agents. Organic peroxide. Flammable solid. Pyrophoric liquids. Pyrophoric solids. Self-heating substances and mixtures. Substances and mixtures, which in contact with water, emit flammable gases. Explosives. Gases.

7.3. Specific end use(s)

Specific use(s)

See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	United Kingdom
XYLENE 1330-20-7	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 100 ppm STEL: 441 mg/m ³ Sk*
2-METHYLPENTANE-2,4-DIOL 107-41-5	TWA: 25 ppm TWA: 123 mg/m ³ STEL: 25 ppm STEL: 123 mg/m ³
ETHYLBENZENE 100-41-4	TWA: 100 ppm TWA: 441 mg/m ³ STEL: 125 ppm STEL: 552 mg/m ³ Sk*

Biological occupational exposure limits

Chemical name	United Kingdom
XYLENE 1330-20-7	650 mmol/mol creatinine - urine (Methyl hippuric acid) - post shift

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
TITANIUM TETRABUTANOLATE 5593-70-4			127 mg/m ³ [4] [6]
XYLENE 1330-20-7		212 mg/kg bw/day [4] [6]	221 mg/m ³ [4] [6] 442 mg/m ³ [4] [7] 221 mg/m ³ [5] [6] 442 mg/m ³ [5] [7]
2-METHYLPENTANE-2,4-DIOL 107-41-5		63 mg/kg bw/day [4] [6]	44.4 mg/m ³ [4] [6] 49 mg/m ³ [5] [6] 98 mg/m ³ [5] [7]
ETHYLBENZENE 100-41-4		180 mg/kg bw/day [4] [6]	77 mg/m ³ [4] [6] 293 mg/m ³ [5] [7]
HEXAMETHYLDISILOXANE 107-46-0		333 mg/kg bw/day [4] [6]	53.4 mg/m ³ [4] [6]

[4] Systemic health effects.
 [5] Local health effects.
 [6] Long term.
 [7] Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
TITANIUM TETRABUTANOLATE 5593-70-4	3.75 mg/kg bw/day [4] [6]	37.5 mg/kg bw/day [4] [6]	152 mg/m ³ [4] [6]
XYLENE 1330-20-7	12.5 mg/kg bw/day [4] [6]		65.3 mg/m ³ [4] [6] 260 mg/m ³ [4] [7] 65.3 mg/m ³ [5] [6] 260 mg/m ³ [5] [7]
2-METHYLPENTANE-2,4-DIOL 107-41-5	2.25 mg/kg bw/day [4] [6]	22.5 mg/kg bw/day [4] [6]	7.8 mg/m ³ [4] [6] 25 mg/m ³ [5] [6] 49 mg/m ³ [5] [7]
ETHYLBENZENE 100-41-4	1.6 mg/kg bw/day [4] [6]		15 mg/m ³ [4] [6]
HEXAMETHYLDISILOXANE 107-46-0	0.27 mg/kg bw/day [4] [6]		13.3 mg/m ³ [4] [6]

[4] Systemic health effects.
 [5] Local health effects.
 [6] Long term.
 [7] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
TITANIUM TETRABUTANOLATE 5593-70-4	0.08 mg/L	2.25 mg/L	0.008 mg/L		
XYLENE 1330-20-7	0.327 mg/L	0.327 mg/L	0.327 mg/L		
2-METHYLPENTANE-2,4-	0.429 mg/L	4.29 mg/L	0.0429 mg/L		

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
DIOL 107-41-5					
HEXAMETHYLDISILOXANE 107-46-0	0.002 mg/L	0.003 mg/L	0.0 mg/l		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
TITANIUM TETRABUTANOLATE 5593-70-4	0.0687 mg/kg sediment dw	0.0069 mg/kg sediment dw	65 mg/L	0.017 mg/kg dry weight dw	
XYLENE 1330-20-7	12.46 mg/kg sediment dw	12.46 mg/kg sediment dw	6.58 mg/L	2.31 mg/kg soil dw	
2-METHYLPENTANE-2,4- DIOL 107-41-5	1.59 mg/kg sediment dw	0.159 mg/kg sediment dw	20 mg/L	0.066 mg/kg soil dw	
HEXAMETHYLDISILOXANE 107-46-0	8.9 mg/kg sediment dw	0.89 mg/kg sediment dw	10 mg/L	0.083 mg/kg soil dw	5.3 mg/kg food

8.2. Exposure controls

Engineering controls

No information available.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection

Wear suitable gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
	Wear protective butyl rubber gloves	> 0.35 mm	> 240 minutes
	Chlorinated polyethylene (CPE)	> 0.35 mm	> 240 minutes
	Wear protective Neoprene™ gloves	> 0.35 mm	> 240 minutes
	Wear protective nitrile rubber gloves	> 0.35 mm	> 240 minutes
	Polyethylene (PE)	> 0.35 mm	> 240 minutes
	Ethyl vinyl alcohol laminate ("EVAL")	> 0.35 mm	> 240 minutes
	Polyvinyl alcohol (PVA)	> 0.35 mm	> 240 minutes
	Polyvinyl chloride (PVC)	> 0.35 mm	> 240 minutes
	Wear protective Viton™ gloves	> 0.35 mm	> 240 minutes

Skin and body protection

Wear appropriate clothing to prevent reasonably probable skin contact. Chemical resistant apron. Antistatic footwear.

Respiratory protection

Use appropriate respiratory protection.
Organic gases and vapours filter conforming to EN 14387. Type AP2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	Colourless to pale yellow
Odour	Solvent.
Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point		Not determined.
Initial boiling point and boiling range	140 °C	@ 760 mmHg.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits	8 % vol	
Lower flammability or explosive limits	0.6 % vol	
Flash point	23 °C	Tag Closed Cup.
Autoignition temperature	> 350 °C	
Decomposition temperature		No information available.
pH		Not applicable. Insoluble in water.
pH (as aqueous solution)		No information available.
Kinematic viscosity	10 mm ² /s	@ 25 °C.
Dynamic viscosity		No information available.
Water solubility	Insoluble in water	
Solubility(ies)		No information available.
Partition coefficient		Not determined.
Vapour pressure	0.32 hPa	
Relative density	0.887	
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	Not considered to be explosive.	
Oxidising properties	Does not meet the criteria for classification as oxidising	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No known effects under normal use conditions.
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10.2. Chemical stability

Stability	Stable under normal conditions.
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Explosion data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react with the product: Strong oxidising agents. When heated, vapours/gases hazardous to health may be formed. Temperatures above 150 °C / 300 °F. Formaldehyde. Vapours may form explosive mixtures with air. Flammable liquid and vapour.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. Avoid static discharge.

10.5. Incompatible materials

Incompatible materials Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Silicon oxides. Metal oxides. Formaldehyde. BUTANOL.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

Inhalation	May cause respiratory irritation. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure if inhaled.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.
Skin contact	Causes skin irritation.
Ingestion	May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Suspected of damaging the unborn child.

Acute toxicity**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 Oral LD50 > 5000 mg/kg
Dermal LD50 Dermal LD50 > 2000 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
TITANIUM TETRABUTANOLATE	= 2000 mg/kg (Rat)	-	-
XYLENE	4300 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	27.5 mg/L (Rat) 4 h
2-METHYLPENTANE-2,4-DIOL	= 3700 mg/kg (Rat)	= 12300 mg/kg (Rabbit)	> 310 mg/m ³ (Rat) 1 h
ETHYLBENZENE	= 4769 mg/kg (Rat)	= 15433 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
HEXAMETHYLDISILOXANE	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	106 mg/l (Rat) 4 h

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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes skin irritation. Symptoms may include pain, severe local redness, swelling, and tissue damage. Dryness and/or cracking.

HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) (-)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause slight irritation Redness Dryness and/or cracking

TITANIUM TETRABUTANOLATE (5593-70-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes skin irritation Redness

XYLENE (1330-20-7)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes skin irritation Symptoms may include pain, severe local redness, swelling, and tissue damage. Dryness and/or cracking

2-METHYLPENTANE-2,4-DIOL (107-41-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause slight irritation Redness

ETHYLBENZENE (100-41-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	Dermal			Mild skin irritant

HEXAMETHYLDISILOXANE (107-46-0)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Prolonged contact may cause redness and irritation

Serious eye damage/eye irritation Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.

HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) (-)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause slight eye irritation Corneal injury is unlikely

TITANIUM TETRABUTANOLATE (5593-70-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes serious eye

					damage
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XYLENE (1330-20-7)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes serious eye irritation

2-METHYLPENTANE-2,4-DIOL (107-41-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Moderate eye irritation Effects may be slow to heal.

ETHYLBENZENE (100-41-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit				Moderate eye irritation

HEXAMETHYLDISILOXANE (107-46-0)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause slight eye irritation

Respiratory or skin sensitisation No information available.

HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) (-)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser

TITANIUM TETRABUTANOLATE (5593-70-4)

Method	Species	Exposure route	Results
	Mouse	Dermal	Not a skin sensitiser

2-METHYLPENTANE-2,4-DIOL (107-41-5)

Method	Species	Exposure route	Results
OECD Test No. 406: Skin Sensitisation	Guinea pig	Dermal	Not a skin sensitiser

ETHYLBENZENE (100-41-4)

Method	Species	Exposure route	Results
	Human evidence	Dermal	Not a skin sensitiser

HEXAMETHYLDISILOXANE (107-46-0)

Method	Species	Exposure route	Results
	Guinea pig human data	Dermal	Not a skin sensitiser

Germ cell mutagenicity No information available.

Component Information

HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) (-)

Method	Species	Results
	in vitro	Negative
		Negative Did not show mutagenic effects in animal experiments

XYLENE (1330-20-7)

Method	Species	Results
	in vitro	Negative

		Negative Did not show mutagenic effects in animal experiments
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2-METHYLPENTANE-2,4-DIOL (107-41-5)

Method	Species	Results
OECD Test No. 473: In vitro Mammalian Chromosome Aberration Test	in vitro	Not mutagenic

ETHYLBENZENE (100-41-4)

Method	Species	Results
	in vitro	In vitro genetic toxicity studies were negative in some cases and positive in other cases.
		Negative Did not show mutagenic effects in animal experiments

HEXAMETHYLDISILOXANE (107-46-0)

Method	Species	Results
	in vitro	Negative
		Did not show mutagenic effects in animal experiments

Carcinogenicity

No information available.

Component Information

HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) (-)

Method	Species	Results
		Did not cause cancer in laboratory animals.

XYLENE (1330-20-7)

Method	Species	Results
		Did not cause cancer in laboratory animals.

ETHYLBENZENE (100-41-4)

Method	Species	Results
		Not expected to cause carcinogenicity

Reproductive toxicity

Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child. Suspected of damaging the unborn child.

XYLENE (1330-20-7)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

2-METHYLPENTANE-2,4-DIOL (107-41-5)

Method	Species	Results
		This product does not contain any known or suspected reproductive

		hazards
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ETHYLBENZENE (100-41-4)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

HEXAMETHYLDISILOXANE (107-46-0)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

STOT - single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) (-)

Method	Species	Exposure route	Effective dose	Exposure time	Results
		Inhalation			May cause drowsiness or dizziness

TITANIUM TETRABUTANOLATE (5593-70-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
		Inhalation			May cause respiratory irritation
		Inhalation			May cause drowsiness or dizziness

XYLENE (1330-20-7)

Method	Species	Exposure route	Effective dose	Exposure time	Results
		Inhalation			May cause drowsiness or dizziness

2-METHYLPENTANE-2,4-DIOL (107-41-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, specific target organ toxicity is not expected after single oral, single inhalation, or single dermal exposure.

ETHYLBENZENE (100-41-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	human data	Inhalation			Based on available data, specific target organ toxicity is not expected after single oral, single inhalation, or single dermal exposure.
	human data	Inhalation			May cause drowsiness or dizziness

HEXAMETHYLDISILOXANE (107-46-0)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, specific target organ toxicity is not expected after single oral, single inhalation, or single dermal exposure.

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure. Causes damage to organs through prolonged or repeated exposure if inhaled.

Component Information

HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) (-)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on information for a similar material: In animals, effects have been reported on the following organs: Central nervous system

XYLENE (1330-20-7)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause damage to organs through prolonged or repeated exposure. In animals, effects have been reported on the following organs: Liver Kidney Blood

2-METHYLPENTANE-2,4-DIOL (107-41-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rat	Oral		3 months	NOAEL mg/kg bw/d

ETHYLBENZENE (100-41-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rat	Inhalation kidney and/or bladder	NOAEL 1.1 mg/L	2 years	Based on available data, a STOT-RE classification is not warranted.
	Mouse	Inhalation	NOAEL 1.1 mg/L	103 weeks	Based on available data, a STOT-RE classification is not warranted.
	Rat	Inhalation	NOAEL 3.4 mg/L	28 days	Not classified
	Rat	Inhalation	NOAEL 2.4 mg/L	5 days	Not classified
	Mouse	Inhalation	NOAEL 3.3 mg/L	103 weeks	Not classified
	Rat	Inhalation	NOAEL 3.3 mg/L	2 years	Not classified
	Multiple animal	Inhalation	NOAEL 4.2 mg/L	90 days	Not classified

	species				
	Multiple animal species	Inhalation	NOAEL 3.3 mg/L	2 years	Not classified
	Rat	Oral	NOAEL 680 mg/kg bw/d	6 months	Not classified

HEXAMETHYLDISILOXANE (107-46-0)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					In animals, effects have been reported on the following organs: Liver Testes Kidney However, the effects are species specific and are not relevant to humans. This material contains hexamethyldisiloxane (HMDS). Repeated inhalation exposure in rats to HMDS resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

Aspiration hazard

May be fatal if swallowed and enters airways. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

Other adverse effects

No information available.

SECTION 12: Ecological information**12.1. Toxicity****Ecotoxicity**

Toxic to aquatic life with long lasting effects. Harmful to aquatic life.

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) (-)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Oncorhynchus mykiss (rainbow trout)	LL50	10 - 30 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EL50	10 - 22 mg/L	48 hours	
OECD Test No. 201: Freshwater Algae and	Pseudokirchneriella subcapitata	EL50	4.6 - 10 mg/L	72 hours	

Cyanobacteria, Growth Inhibition Test					
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	NOELR	1 mg/L	72 hours	
Chronic toxicity	Daphnia magna	LOEC	0.203 mg/L	21 hours	
Chronic toxicity	Daphnia magna	NOEC	0.097 mg/L	21 hours	

XYLENE (1330-20-7)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test or Equivalent.	Oncorhynchus mykiss (rainbow trout)	LC50	2.6 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test or Equivalent.	Daphnia magna	IC50	1 - 4.7 mg/L	24 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test OECD Test No. 203: Fish, Acute Toxicity Test or Equivalent.	Pseudokirchneriella subcapitata	ErC50	4.36 mg/L	73 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test or Equivalent.	Pseudokirchneriella subcapitata	NOEC	0.44 mg/L	73 hours	
Chronic toxicity	Oncorhynchus mykiss (rainbow trout)	NOEC	> 1.3 mg/L	56 days	

2-METHYLPENTANE-2,4-DIOL (107-41-5)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test or Equivalent.	Oncorhynchus mykiss (rainbow trout)	LC50	9450 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test or Equivalent.	Daphnia magna	EC50	3200 mg/L	48 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test or Equivalent.	Selenastrum capricornutum	ErC50	> 429 mg/L	72 hours	
Bacteria toxicity		EC50	> 5000 mg/L	16 hours	

ETHYLBENZENE (100-41-4)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test or Equivalent.	Oncorhynchus mykiss (rainbow trout)	LC50	4.2 mg/L	96 hours	
	Daphnia magna	EC50	1.8 - 2.4 mg/L	48 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test or	Pseudokirchneriella subcapitata	EC50	3.6 - 4.6 mg/L	72 hours	

Equivalent.					
Bacteria toxicity		EC50	> 12 mg/L	16 hours	
Chronic toxicity	Ceriodaphnia dubia	NOEC	0.96 mg/L	7 days	
	Eisenia fetida	LC50	0.047 mg/cm2	2 days	

HEXAMETHYLDISILOXANE (107-46-0)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Oncorhynchus mykiss (rainbow trout)	LC50	0.46 mg/L	96 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Selenastrum capricornutum	ErC50	> 0.55 mg/L	72 hours	
Chronic aquatic toxicity	Pimephales promelas	NOEC	0.029 mg/L	32 days	
Chronic toxicity	Daphnia magna	NOEC	0.08 mg/L	21 days	

12.2. Persistence and degradability

Persistence and degradability No information available.

HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%) (-)

Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)	28 days	Biodegradation 75%	Biodegradable

XYLENE (1330-20-7)

Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F) or Equivalent.	10 days	Biodegradation > 60%	Readily biodegradable

2-METHYLPENTANE-2,4-DIOL (107-41-5)

Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F) or Equivalent.	28 days	81% Biodegradation	Readily biodegradable

ETHYLBENZENE (100-41-4)

Method	Exposure time	Value	Results
OECD Test No. 301E: Ready Biodegradability: Modified OECD Screening Test (TG 301 E) or Equivalent.	6 days	100 % Biodegradation	Readily biodegradable

HEXAMETHYLDISILOXANE (107-46-0)

Method	Exposure time	Value	Results
OECD Test No. 301C: Ready Biodegradability: Modified MITI Test (I) (TG 301 C)	28 days	Biodegradation 2%	Expected to biodegrade very slowly

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
TITANIUM TETRABUTANOLATE	0.88
XYLENE	3.12
2-METHYLPENTANE-2,4-DIOL	0.58
ETHYLBENZENE	3.15
HEXAMETHYLDISILOXANE	5.06

12.4. Mobility in soil

Mobility in soil Insoluble.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
TITANIUM TETRABUTANOLATE	The substance is not PBT / vPvB
XYLENE	The substance is not PBT / vPvB
2-METHYLPENTANE-2,4-DIOL	The substance is not PBT / vPvB
ETHYLBENZENE	The substance is not PBT / vPvB
HEXAMETHYLDISILOXANE	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number UN1993
 14.2 UN proper shipping name FLAMMABLE LIQUID, N.O.S. (HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%), ETHYLBENZENE)
 14.3 Transport hazard class(es) 3
 14.4 Packing group III
 14.5 Environmental hazards Yes
 14.6 Special precautions for user
 Special Provisions A3
 ERG Code 3L

IMDG

14.1 UN number or ID number UN1993
 UN proper shipping name FLAMMABLE LIQUID, N.O.S. (HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%), ETHYLBENZENE)
 14.3 Transport hazard class(es) 3
 14.4 Packing group III

14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	223, 274, 955
EmS-No	F-E, S-E
14.7 Maritime transport in bulk according to IMO instruments	No information available
RID	
14.1 UN number or ID number	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%), ETHYLBENZENE)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 601
Classification code	F1
ADR	
14.1 UN number or ID number	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (HYDROCARBONS C9-12 N-ALKANES, ISOALKANES CYCLIC AROMATICS (2-25%), ETHYLBENZENE)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 601
Classification code	F1
Tunnel restriction code	(D/E)

SECTION 15: Regulatory information

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

National regulations

Authorisations and/or restrictions on use:

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

P5c - FLAMMABLE LIQUIDS

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No Chemical Safety Assessment has been carried out for this substance/mixture

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

- H225 - Highly flammable liquid and vapour
H226 - Flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin
H315 - Causes skin irritation
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H361d - Suspected of damaging the unborn child
H372 - Causes 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

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

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Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Prepared By Lisa Bland

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This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
 Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Disclaimer

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

End of Safety Data Sheet