

SECTION 1

IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product form: Mixture
 Product name: Siloxol Stormguard

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

1.2.1. Relevant identified uses

Main use category: Professional use, Consumer use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Twistfix LTD
 KKM Buildings, Old Reservoir Road, Farlington,
 Portsmouth, Hampshire PO6 1SU.
 sales@twistfix.co.uk
 www.twistfix.co.uk

1.4. Emergency telephone number

Emergency number : +44 (0)345 123 6006

SECTION 2

HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2 - H315

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H315 - Causes skin irritation

Precautionary statements (CLP)

: P264 - Wash hands, forearms and face thoroughly after handling.

: P273 - Avoid release to the environment.

: P280 - Wear protective gloves, protective clothing, eye protection, face protection.

: P302+P352 - IF ON SKIN: Wash with plenty of water.

: P332+P313 - If skin irritation occurs: Get medical advice/attention.

: P362+P364 - Take off contaminated clothing and wash it before reuse.



2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3

COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Triethoxyoctylsilane	CAS-No.: 2943-75-1	≥ 10 - < 50	Skin Irrit. 2, H315
	EC-No.: 220-941-2		Aquatic Chronic 2, H411
	REACH-no: 01-2119972313-39		

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

SECTION 4 FIRST AID MEASURES**4.1. Description of first aid measures**

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact: Wash with plenty of water/... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects after skin contact: Causes skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed: No additional information available**SECTION 5 FIREFIGHTING MEASURES****5.1. Extinguishing media**

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

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: No additional information available

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6 ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

Emergency procedures: Evacuate unnecessary personnel

SECTION 6 ACCIDENTAL RELEASE MEASURES (CONT)**6.1.2. For emergency responders**

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7 HANDLING AND STORAGE**7.1. Precautions for safe handling**

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures: Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

No additional information available

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2 Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

SECTION 8**EXPOSURE CONTROLS/PERSONAL PROTECTION (CONT)****8.1.4. DNEL and PNEC****Triethoxyoctylsilane (2943-75-1)****DNEL/DMEL (Workers)**

Long-term - systemic effects, dermal	2.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	17.6 mg/m ³

DNEL/DMEL (General population)

Long-term - systemic effects, oral	1.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.3 mg/m ³
Long-term - systemic effects, dermal	1.25 mg/kg bodyweight/day

PNEC (Water)

PNEC aqua (freshwater)	0.002 mg/l
PNEC aqua (marine water)	0 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	4.2 mg/kg dwt
PNEC sediment (marine water)	0.42 mg/kg dwt

PNEC (STP)

PNEC sewage treatment plant	100 mg/l
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8.1.5. Control banding

No additional information available

8.2. Exposure controls**8.2.1. Appropriate engineering controls**

No additional information available

8.2.2. Personal protection equipment**Personal protective equipment:**

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):**8.2.2.1. Eye and face protection****Eye protection:** Chemical goggles or safety glasses**8.2.2.2. Skin protection****Skin and body protection:** Wear suitable protective clothing**Hand protection:** Wear protective gloves.**8.2.2.3. Respiratory protection****Respiratory protection:** Wear appropriate mask**8.2.2.4. Thermal hazards****No additional information available****8.2.3. Environmental exposure controls****Other information:** Do not eat, drink or smoke during use.**SECTION 9****PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties**

Physical state	Liquid
Appearance	Viscous liquid
Colour	white
Odour	characteristic.
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	> 100 °C DIN EN 22719
Auto-ignition temperature	No data available
Decomposition temperature	No data available

Flammability (solid, gas)	Non flammable
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	≈ 1 g/cm ³
Solubility	insoluble in water
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	1000-2000 mPa·s @25°C
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

9.2. Other information No additional information available

SECTION 10 STABILITY AND REACTIVITY**10.1. Reactivity**

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Acute toxicity (oral) :	Not classified*
Acute toxicity (dermal) :	Not classified*
Acute toxicity (inhalation) :	Not classified*

Triethoxyoctylsilane (2943-75-1)

LD50 oral rat	≥ 5110 mg/kg bodyweight Animal: rat Guideline: OECD Guideline 401 (Acute Oral Toxicity) Guideline: other Remarks on results: other
LD50 dermal rabbit	> 6730 mg/kg
LC50 Inhalation - Rat [ppm]	≈ 22 ppm

Skin corrosion/irritation:	Causes skin irritation.
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitisation:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT-single exposure:	Not classified
STOT-repeated exposure:	Not classified

Additional information: (for all above)

Based on available data, the classification criteria are not met

Triethoxyoctylsilane (2943-75-1)

NOAEL (oral, rat, 90 days)	≈ 250 mg/kg bodyweight Animal: rat Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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Aspiration hazard:	Not classified
Potential adverse human health effects and symptoms:	
Based on available data, the classification criteria are not met	

SECTION 12 ECOLOGICAL INFORMATION**12.1. Toxicity****Hazardous to the aquatic environment, short-term:** Not classified (acute)**Hazardous to the aquatic environment, long-term:** Not classified (chronic)**Triethoxyoctylsilane (2943-75-1)**

LC50 - Fish [1]	> 0.055 mg/l Test organisms (species) Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 0.049 mg/l Test organisms (species) Daphnia magna
EC50 72h - Algae [1]	> 0.13 mg/l Test organisms (species) Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.189 mg/l
LOEC (chronic)	0.562 mg/l Test organisms (species) Daphnia magna Duration: '21 d'
NOEC (chronic)	0.199 mg/l Test organisms (species) Daphnia magna Duration: '21 d'
NOEC chronic algae	≥ 1000 mg/l

12.2. Persistence and degradability

Siloxol Stormguard	
Persistence and degradability	Not established.
Triethoxyoctylsilane (2943-75-1)	
Biodegradation	31.5 %

12.3. Bioaccumulative potential

Siloxol Stormguard	
Bioaccumulative potential	Not established.

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Siloxol Stormguard

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SECTION 12 ECOLOGICAL INFORMATION (CONT)

Triethoxyoctylsilane (2943-75-1)
Partition coefficient n-octanol/water (Log Pow) 6.41

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available.

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials: Avoid release to the environment.

SECTION 14 TRANSPORT INFORMATION

In accordance with ADR / IMDG

	ADR	IMDG
14.1. UN number	Not regulated	Not regulated
14.2. UN proper shipping name	Not regulated	Not regulated
14.3. Transport hazard class(es)	Not regulated	Not regulated
14.4. Packing group	Not regulated	Not regulated
14.5. Environmental hazards	Not regulated	Not regulated

No supplementary information available

14.6. Special precautions for user

Overland transport	Not regulated
Transport by sea	Not regulated

14.7. Transport in bulk according to Annex II of Marpol & the IBC Code

Not applicable

SECTION 15 REGULATORY INFORMATION

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(b)	Siloxol Stormguard; Triethoxyoctylsilane
3(c)	Triethoxyoctylsilane

Contains no substance on the REACH candidate list. Contains no REACH Annex XIV substances. Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals. Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants. Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer. Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors. Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16 OTHER INFORMATION

Data sources: Regulation (Ec) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on Classification, Labelling and Packaging of Substances and Mixtures, Amending and Repealing Directives 67/548/eec and 1999/45/ec, and Amending Regulation (Ec) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard, Category 2
H315	Causes skin irritation.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2

SDS EU (REACH Annex II) 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 provided is designed only as guidance for safe use, processing, handling, storage, transport, release and disposal. It 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 use in combination with any other materials or in any process, unless specified in this safety data sheet.