

Safety Data Sheet according to Regulation (EC) No 1907/2006

Page 1 of 11

SDS No.: 268236

V004.0

Revision: 29.06.2016

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Replaces version from: 25.04.2015

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

1.1. Product identifier

TEROSON MS 939 WH

TEROSON MS 939 WH

Contains:

Dibutoxydibutylstannane

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

Intended use:

1-Component sealant

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Toxic to reproduction

Category 1B

H360FD May damage fertility. May damage the unborn child

2.2. Label elements

Label elements (CLP):

azard pictogram:	

Signal word: Danger

Hazard statement: H360FD May damage fertility. May damage the unborn child.

MSDS-No.: 268236 TEROSON MS 939 WH Page 2 of 11

V004.0

Supplemental information	Restricted to professional users. Contains Dibutoxydibutylstannane. May produce an allergic reaction.
Precautionary statement: Prevention	P201 Obtain special instructions before use.
Precautionary statement: Response	P308+P313 IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Sealant

Base substances of preparation:

Silane-modified polyether

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Trimethoxyvinylsilane 2768-02-7	220-449-8 01-2119513215-52	1- < 3 %	Flam. Liq. 3 H226 Acute Tox. 4; Inhalation H332
Dibutoxydibutylstannane 3349-36-8	222-103-1 01-2119557858-18	0,1-< 0,5 %	Skin Sens. 1 H317 Skin Corr. 1C; Dermal H314 Muta. 2 H341 STOT RE 1; Inhalation, Oral H372 Repr. 1B H360FD Aquatic Chronic 2 H411

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Symptoms of poisoning may occur even after several hours, continue medical observation for at least 48 hours after the accident.

Inhalation

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If necessary, see a dermatologist.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

MSDS-No.: 268236 TEROSON MS 939 WH Page 3 of 11

V004.0

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

An allergic reaction cannot be excluded after repeated skin contact.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

All common extinguishing agents are suitable.

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

In case of fire toxic gases can be released.

5.3. Advice for firefighters

Wear protective equipment.

Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment.

Avoid contact with skin and eyes.

Keep unprotected persons away.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Remove mechanically.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Temperatures between + 10 $^{\circ}C$ and + 25 $^{\circ}C$

7.3. Specific end use(s)

1-Component sealant

MSDS-No.: 268236 TEROSON MS 939 WH Page 4 of 11

V004.0

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Dibutoxydibutylstannane 3349-36-8 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,1	Time Weighted Average (TWA):		EH40 WEL
Dibutoxydibutylstannane 3349-36-8 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,2	Short Term Exposure Limit (STEL):		EH40 WEL
Dibutoxydibutylstannane 3349-36-8 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]			Skin designation:	Can be absorbed through the skin.	EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Dibutoxydibutylstannane 3349-36-8 [TIN ORGANIC COMPOUNDS, (AS SN)]		0,2	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL

MSDS-No.: 268236 TEROSON MS 939 WH Page 5 of 11

V004.0

Dibutoxydibutylstannane	0,1	Time Weighted Average	Indicative OELV	IR_OEL
3349-36-8		(TWA):		
[TIN ORGANIC COMPOUNDS, (AS SN)]				

$\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period					Remarks
			mg/l	ppm	mg/kg	others	
Trimethoxyvinylsilane 2768-02-7	aqua (freshwater)					0,34 mg/L	
Trimethoxyvinylsilane 2768-02-7	aqua (marine water)					0,034 mg/L	
Trimethoxyvinylsilane 2768-02-7	aqua (intermittent releases)					3,4 mg/L	
Trimethoxyvinylsilane 2768-02-7	sewage treatment plant (STP)					110 mg/L	
Trimethoxyvinylsilane 2768-02-7	sediment (freshwater)				0,27 mg/kg		
Trimethoxyvinylsilane 2768-02-7	sediment (marine water)				0,12 mg/kg		
Trimethoxyvinylsilane 2768-02-7	soil				0,046 mg/kg		
Dibutoxydibutylstannane 3349-36-8	aqua (freshwater)					0,0019 mg/L	
Dibutoxydibutylstannane 3349-36-8	aqua (marine water)					0,00019 mg/L	
Dibutoxydibutylstannane 3349-36-8	sewage treatment plant (STP)					33 mg/L	
Dibutoxydibutylstannane 3349-36-8	sediment (freshwater)				0,193 mg/kg		
Dibutoxydibutylstannane 3349-36-8	sediment (marine water)				0,0193 mg/kg		
Dibutoxydibutylstannane 3349-36-8	soil				0,076 mg/kg		

MSDS-No.: 268236 TEROSON MS 939 WH Page 6 of 11

V004.0

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Trimethoxyvinylsilane 2768-02-7	Workers	dermal	Long term exposure - systemic effects		0,69 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	Workers	Inhalation	Long term exposure - systemic effects		4,9 mg/m3	
Trimethoxyvinylsilane 2768-02-7	general population	dermal	Acute/short term exposure - systemic effects		26,9 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	general population	Inhalation	Acute/short term exposure - systemic effects		93,4 mg/m3	
Trimethoxyvinylsilane 2768-02-7	general population	dermal	Long term exposure - systemic effects		0,3 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	general population	Inhalation	Long term exposure - systemic effects		1,04 mg/m3	
Trimethoxyvinylsilane 2768-02-7	general population	oral	Long term exposure - systemic effects		0,3 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	Workers	dermal	Acute/short term exposure - systemic effects		0,69 mg/kg bw/day	
Trimethoxyvinylsilane 2768-02-7	Workers	Inhalation	Acute/short term exposure - systemic effects		4,9 mg/m3	
Dibutoxydibutylstannane 3349-36-8	Workers	dermal	Acute/short term exposure - systemic effects		1 mg/kg	
Dibutoxydibutylstannane 3349-36-8	Workers	inhalation	Acute/short term exposure - systemic effects		0,07 mg/m3	
Dibutoxydibutylstannane 3349-36-8	Workers	dermal	Long term exposure - systemic effects		0,2 mg/kg	
Dibutoxydibutylstannane 3349-36-8	Workers	inhalation	Long term exposure - systemic effects		0,01 mg/m3	
Dibutoxydibutylstannane 3349-36-8	general population	dermal	Acute/short term exposure - systemic effects		0,5 mg/kg	
Dibutoxydibutylstannane 3349-36-8	general population	inhalation	Acute/short term exposure - systemic effects		0,02 mg/m3	
Dibutoxydibutylstannane 3349-36-8	general population	oral	Acute/short term exposure - systemic effects		0,01 mg/kg	
Dibutoxydibutylstannane 3349-36-8	general population	dermal	Long term exposure - systemic effects		0,08 mg/kg	
Dibutoxydibutylstannane 3349-36-8	general population	inhalation	Long term exposure - systemic effects		0,003 mg/m3	
Dibutoxydibutylstannane 3349-36-8	general population	oral	Long term exposure - systemic effects		0,002 mg/kg	

Biological Exposure Indices: None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

MSDS-No.: 268236 TEROSON MS 939 WH Page 7 of 11

V004.0

Respiratory protection:

In case of dust formation, we recommend wearing of appropriate respiratory protection equipment with particle filter P (EN

This recommendation should be matched to local conditions.

Hand protection:

Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >=1 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >=1 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Goggles which can be tightly sealed.

Protective eye equipment should conform to EN166.

Skin protection:

Wear protective equipment.

Protective clothing that covers arms and legs.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

Use only personal protection that's CE-labelled according to Directive 89/686/EEC (Europe) or to Regulation No. 819 of 19 August 1994 (Norway).

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance solid material

> pasty grey

Odor characteristic

Odour threshold No data available / Not applicable

pН No data available / Not applicable Initial boiling point No data available / Not applicable ; no methodNo flash point up to 100 °C Flash point Decomposition temperature No data available / Not applicable Vapour pressure No data available / Not applicable

Density 1,50 g/cm3

(20 °C (68 °F))

Bulk density No data available / Not applicable

200 - 300 pa.s Viscosity (; 20 °C (68 °F))

Viscosity (kinematic) No data available / Not applicable Explosive properties No data available / Not applicable Insoluble

Solubility (qualitative)

(20 °C (68 °F); Solvent: Water) Solidification temperature No data available / Not applicable Melting point No data available / Not applicable

Flammability No data available / Not applicable Auto-ignition temperature No data available / Not applicable Explosive limits No data available / Not applicable Partition coefficient: n-octanol/water No data available / Not applicable Evaporation rate No data available / Not applicable Vapor density No data available / Not applicable

Solid content 98 %

(105 °C)

MSDS-No.: 268236 TEROSON MS 939 WH Page 8 of 11

V004.0

Oxidising properties

No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

None if used for intended purpose.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

None if used for intended purpose.

10.5. Incompatible materials

None if used properly.

10.6. Hazardous decomposition products

No decomposition if used according to specifications.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Sensitizing:

An allergic reaction cannot be excluded after repeated skin contact.

Reproductive toxicity:

May damage fertility. May damage the unborn child.

Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Trimethoxyvinylsilane 2768-02-7	LD50	7.120 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Dibutoxydibutylstannane 3349-36-8	LD50	> 2.000 mg/kg	oral		rat	OECD Guideline 420 (Acute Oral Toxicity)
Dibutoxydibutylstannane 3349-36-8	Acute toxicity estimate (ATE)	> 2.500 mg/kg				Expert judgement

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Trimethoxyvinylsilane	LC50	16,8 mg/l	Vapor.	4 h	rat	OECD Guideline 403 (Acute
2768-02-7						Inhalation Toxicity)

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Trimethoxyvinylsilane 2768-02-7	LD50	3.540 mg/kg	dermal		rabbit	

MSDS-No.: 268236 TEROSON MS 939 WH Page 9 of 11

V004.0

Skin corrosion/irritation:

Hazardous components	Result	Exposure	Species	Method
CAS-No.		time		
Dibutoxydibutylstannane	corrosive	24 h	rat	expert judgment
3349-36-8				

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Dibutoxydibutylstannane 3349-36-8	positive	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)

Reproductive toxicity:

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
Dibutoxydibutylstannane 3349-36-8	NOAEL P = 1,9 - 2,3 mg/kg	screening oral: feed		rat	OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following. Do not empty into drains, soil or bodies of water.

12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Trimethoxyvinylsilane	LC50	191 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
2768-02-7						203 (Fish, Acute
	l l					Toxicity Test)
Trimethoxyvinylsilane	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
2768-02-7						202 (Daphnia sp.
						Acute
						Immobilisation
						Test)
Trimethoxyvinylsilane	EC50	> 100 mg/l	Algae	72 h		OECD Guideline
2768-02-7						201 (Alga, Growth
	50.50	2.500 //				Inhibition Test)
Trimethoxyvinylsilane	EC 50	> 2.500 mg/l	Bacteria	3 h		OECD Guideline
2768-02-7						209 (Activated
						Sludge, Respiration
Dibutayydibutylatannana	LC50	> 3,1 mg/l	Fish		Brachydanio rerio (new name:	Inhibition Test) OECD Guideline
Dibutoxydibutylstannane 3349-36-8	LC30	> 5,1 Hig/1	FISH		`	
3349-30-8					Danio rerio)	203 (Fish, Acute Toxicity Test)
Dibutoxydibutylstannane	EC50	1,9 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
3349-36-8	ECSO	1,9 mg/1	Барина	40 11	Dapinna magna	202 (Daphnia sp.
3347 30 0						Acute
						Immobilisation
						Test)
Dibutoxydibutylstannane	EC50	> 2 mg/l	Algae	72 h	Scenedesmus subspicatus (new	OECD Guideline
3349-36-8	2000	, 2 mg 1	1 ingue	, 2 11	name: Desmodesmus	201 (Alga, Growth
					subspicatus)	Inhibition Test)
Dibutoxydibutylstannane	EC50	> 1.000 mg/l	Bacteria	3 h	activated sludge of a	OECD Guideline
3349-36-8		· ·			predominantly domestic sewage	209 (Activated
						Sludge, Respiration
						Inhibition Test)

MSDS-No.: 268236 TEROSON MS 939 WH Page 10 of 11

V004.0

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential / 12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Trimethoxyvinylsilane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
2768-02-7	Bioaccumulative (vPvB) criteria.
Dibutoxydibutylstannane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
3349-36-8	Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

08 04 09 Waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

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

not applicable

MSDS-No.: 268236 TEROSON MS 939 WH Page 11 of 11

V004.0

SECTION 15: Regulatory information

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

VOC content 0 %

(VOCV 814.018 VOC regulation CH)

VOC Paints and Varnishes (EU):

Product (sub)category: This product is not a subject of the Directive 2004/42/EC

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

H226 Flammable liquid and vapor.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H341 Suspected of causing genetic defects.

H360FD May damage fertility. May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.