

TEROSON MS 9399 BK

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

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

1.1. Product identifier

TEROSON MS 9399 BK

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

Intended use: MS Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Ltd Adhesives Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

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

ua-productsafety.uk@henkel.com

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.com.

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY- Email: technical.services@henkel.co.uk

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.2. Label elements

Label elements (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

Supplemental information Contains: Dibutoxydibutylstannane; Trimethoxyvinylsilane May produce an allergic

reaction.

Safety data sheet available on request.

2.3. Other hazards

None if used properly.

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:

adhesive and sealant

Base substances of preparation:

Silane-modified polyether

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Dibutoxydibutylstannane	222-103-1	0,1-< 0,3 %	Skin Corr. 1C; Dermal
3349-36-8	01-2119557858-18		H314
			Skin Sens. 1
			H317
			Muta. 2
			H341
			Repr. 1B
			H360FD
			STOT SE 1
			H370
			STOT RE 1
			H372
			Aquatic Chronic 2
			H411
Trimethoxyvinylsilane	220-449-8	0,1-< 1 %	Flam. Liq. 3
2768-02-7	01-2119513215-52		H226
			Acute Tox. 4; Inhalation
			H332
			STOT RE 2
			H373
			Skin Sens. 1B
			H317

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

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 if necessary.

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.

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:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Keep container in a well ventilated place.

Store in a cool, frost-free place.

Storage at 5 to 25°C is recommended.

7.3. Specific end use(s)

MS Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE		10	Time Weighted Average (TWA):		EH40 WEL
DUST] 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
Calcium carbonate 471-34-1 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL
Carbon black 1333-86-4 [CARBON BLACK]		3,5	Time Weighted Average (TWA):		EH40 WEL
Carbon black 1333-86-4 [CARBON BLACK]		7	Short Term Exposure Limit (STEL):	15 minutes	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)]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Dibutoxydibutylstannane 3349-36-8 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,2	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit	Regulatory list
				category / Remarks	

Calcium carbonate 471-34-1 [CALCIUM CARBONATE]	4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE]	10	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [DUSTS NON-SPECIFIC]	4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [DUSTS NON-SPECIFIC]	10	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS]	6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS]	2,4	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [DUSTS NON-SPECIFIC]	10	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [DUSTS NON-SPECIFIC]	4	Time Weighted Average (TWA):		IR_OEL
Carbon black 1333-86-4 [CARBON BLACK]	3	Time Weighted Average (TWA):		IR_OEL
Dibutoxydibutylstannane 3349-36-8 [TIN, ORGANIC COMPOUNDS]	0,2	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
Dibutoxydibutylstannane 3349-36-8 [TIN, ORGANIC COMPOUNDS]	0,1	Time Weighted Average (TWA):	Indicative OELV	IR_OEL

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

Name on list	Environmental	Exposure	Value				Remarks
	Compartment	period					
			mg/l	ppm	mg/kg	others	
Dibutoxydibutylstannane	aqua		0,0019				
3349-36-8	(freshwater)		mg/l				
Dibutoxydibutylstannane	aqua (marine		0,00019				
3349-36-8	water)		mg/l				
Dibutoxydibutylstannane	sewage		33 mg/l				
3349-36-8	treatment plant						
	(STP)						
Dibutoxydibutylstannane	sediment				0,193		
3349-36-8	(freshwater)				mg/kg		
Dibutoxydibutylstannane	sediment				0,0193		
3349-36-8	(marine water)				mg/kg		
Dibutoxydibutylstannane	Soil				0,076		
3349-36-8					mg/kg		
Trimethoxyvinylsilane	aqua		0,4 mg/l				
2768-02-7	(freshwater)						
Trimethoxyvinylsilane	aqua (marine		0,04 mg/l				
2768-02-7	water)						
Trimethoxyvinylsilane	freshwater -		1,21 mg/l				
2768-02-7	intermittent						
Trimethoxyvinylsilane	sediment				1,5 mg/kg		
2768-02-7	(freshwater)						
Trimethoxyvinylsilane	sediment				0,15 mg/kg		
2768-02-7	(marine water)						
Trimethoxyvinylsilane	Soil				0,06 mg/kg		
2768-02-7							

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
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	
Trimethoxyvinylsilane 2768-02-7	Workers	dermal	Long term exposure - systemic effects		3,9 mg/kg	
Trimethoxyvinylsilane 2768-02-7	Workers	inhalation	Long term exposure - systemic effects		27,6 mg/m3	
Trimethoxyvinylsilane 2768-02-7	General population	dermal	Long term exposure - systemic effects		7,8 mg/kg	
Trimethoxyvinylsilane 2768-02-7	General population	inhalation	Long term exposure - systemic effects		6,7 mg/m3	
Trimethoxyvinylsilane 2768-02-7	General population	oral	Long term exposure - systemic effects		0,3 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

If intensive ventilation/extraction is not possible respiratory protection equipment with ABEK P2 filter (EN 14387) should be worn.

The product should only be used at workplaces with intensive ventilation/extraction.

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:

Protective goggles

Protective eye equipment should conform to EN166.

Skin protection:

Wear protective equipment.

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 paste

pasty black

black

Odor characteristic

Odour threshold No data available / Not applicable

pH Not applicable, Mixture reacts with water.

Melting point No data available / Not applicable No data available / Not applicable Solidification temperature Initial boiling point No data available / Not applicable Flash point > 93 °C (> 199.4 °F); Estimated Evaporation rate No data available / Not applicable Flammability No data available / Not applicable No data available / Not applicable Explosive limits Vapour pressure No data available / Not applicable Relative vapour density: No data available / Not applicable

Density 1,28 - 1,43 g/cm3

(20 °C (68 °F))

Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable
No data available / Not applicable
No data available / Not applicable
Partition coefficient: n-octanol/water

No data available / Not applicable
Auto-ignition temperature

No data available / Not applicable
Decomposition temperature

No data available / Not applicable

Viscosity 120.000 mPa.s

0

Viscosity (kinematic)

Explosive properties

Oxidising properties

No data available / Not applicable
No data available / Not applicable
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

General toxicological information:

An allergic reaction cannot be excluded after repeated skin contact.

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

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

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Trimethoxyvinylsilane	LD50	3.200 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
2768-02-7				

Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
Trimethoxyvinylsilane	LC50	16,8 mg/l	vapour	4 h	rat	OECD Guideline 403 (Acute
2768-02-7						Inhalation Toxicity)

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Dibutoxydibutylstannane 3349-36-8	corrosive	24 h	rat	Expert judgement
Trimethoxyvinylsilane 2768-02-7	not irritating		rabbit	other guideline:

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure	Species	Method
Trimethoxyvinylsilane	not irritating	time	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
2768-02-7				·

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
Trimethoxyvinylsilane 2768-02-7	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of	Metabolic activation /	Species	Method
		administration	Exposure time		
Dibutoxydibutylstannane	positive	in vitro mammalian	with and without		OECD Guideline 473 (In vitro
3349-36-8		chromosome			Mammalian Chromosome
		aberration test			Aberration Test)
Trimethoxyvinylsilane	negative	bacterial reverse	with and without		OECD Guideline 471
2768-02-7		mutation assay (e.g			(Bacterial Reverse Mutation
		Ames test)			Assay)
Trimethoxyvinylsilane	positive	in vitro mammalian	with and without		OECD Guideline 473 (In vitro
2768-02-7		chromosome			Mammalian Chromosome
		aberration test			Aberration Test)
Trimethoxyvinylsilane	negative	mammalian cell	with and without		OECD Guideline 476 (In vitro
2768-02-7		gene mutation assay			Mammalian Cell Gene
					Mutation Test)
Trimethoxyvinylsilane	negative	intraperitoneal		mouse	other guideline:
2768-02-7	_	_			_

Carcinogenicity

No data available.

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	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)
Trimethoxyvinylsilane 2768-02-7	NOAEL P 250 mg/kg	one- generation study	oral: gavage	rat	OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)
Trimethoxyvinylsilane 2768-02-7	NOAEL P 1.000 mg/kg	one- generation study	oral: gavage	rat	OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)
Trimethoxyvinylsilane 2768-02-7	NOAEL F1 1.000 mg/kg	one- generation study	oral: gavage	rat	OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Trimethoxyvinylsilane 2768-02-7	NOAEL < 62,5 mg/kg	oral: gavage	42d daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Trimethoxyvinylsilane 2768-02-7	NOAEL 0,605 mg/l	inhalation: vapour	5 days/week for 14 weeks 6 hours/day	rat	not specified

Aspiration hazard:

No data available.

SECTION 12: Ecological information

General ecological information:

Do not empty into drains, soil or bodies of water.

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Dibutoxydibutylstannane	LC50	> 3,1 mg/l		Brachydanio rerio (new name:	OECD Guideline 203 (Fish,
3349-36-8				Danio rerio)	Acute Toxicity Test)
Trimethoxyvinylsilane	LC50	191 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
2768-02-7					Acute Toxicity Test)

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Dibutoxydibutylstannane	EC50	1,9 mg/l	48 h	Daphnia magna	OECD Guideline 202
3349-36-8					(Daphnia sp. Acute
					Immobilisation Test)
Trimethoxyvinylsilane	EC50	168,7 mg/l	48 h	Daphnia magna	EU Method C.2 (Acute
2768-02-7					Toxicity for Daphnia)

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Trimethoxyvinylsilane	NOEC	28,1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
2768-02-7					magna, Reproduction Test)

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Dibutoxydibutylstannane	EC50	> 2 mg/l	72 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
3349-36-8				name: Desmodesmus	Growth Inhibition Test)
				subspicatus)	
Trimethoxyvinylsilane	EC50	> 957 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal
2768-02-7					Inhibition test)
Trimethoxyvinylsilane	NOEC	957 mg/l	72 h	Desmodesmus subspicatus	EU Method C.3 (Algal
2768-02-7					Inhibition test)

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Dibutoxydibutylstannane	EC50	> 1.000 mg/l	3 h	activated sludge of a	OECD Guideline 209
3349-36-8				predominantly domestic sewage	(Activated Sludge,
					Respiration Inhibition Test)
Trimethoxyvinylsilane	EC50	> 100 mg/l	3 h	activated sludge of a	OECD Guideline 209
2768-02-7				predominantly domestic sewage	(Activated Sludge,
					Respiration Inhibition Test)

12.2. Persistence and degradability

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
Trimethoxyvinylsilane	not readily biodegradable.	aerobic	51 %	28 d	OECD Guideline 301 F (Ready
2768-02-7					Biodegradability: Manometric
					Respirometry Test)

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Dibutoxydibutylstannane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
3349-36-8	Bioaccumulative (vPvB) criteria.
Trimethoxyvinylsilane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
2768-02-7	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 10 Waste adhesives and sealants other than those mentioned in 08 04 09.

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

SECTION 15: Regulatory information

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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Not applicable dioctyltin oxide CAS 870-08-6

Dibutoxydibutylstannane

CAS 3349-36-8

Persistent organic pollutants (Regulation (EU) 2019/1021): Not applicable

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC): Not applicable

VOC content 0,4 % (2010/75/EU)

15.2. Chemical safety assessment

A chemical safety assessment has 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.

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.

H411 Toxic to aquatic life with long lasting effects.

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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.

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Safety Data Sheet according to (EC) No 1907/2006 as amended Page 1 of 10

SDS No.: 111809

V006.0 Revision: 18.06.2021

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Replaces version from: 22.09.2017

TEROSON MS 9399 BK

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

1.1. Product identifier

TEROSON MS 9399 BK

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

Intended use:

Part B of a two part adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Ltd Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

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

 $ua\text{-}products a fety. uk @\,henkel.com$

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.com.

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY- Email: technical.services@henkel.co.uk

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.2. Label elements

Label elements (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.3. Other hazards

None if used properly.

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:

Adhesive

Base substances of preparation:

Polymer, silan-terminated

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

Contains no dangerous substances exceeding the limits of the EU-Regulation

SECTION 4: First aid measures

4.1. Description of first aid measures

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.

Eve contact

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

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

No data available.

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.

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.

Store frost-free.

Storage at 15 to 25°C is recommended.

7.3. Specific end use(s)

Part B of a two part adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 7631-86-9 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS]		2,4	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 7631-86-9 [SILICA, AMORPHOUS]		2,4	Time Weighted Average (TWA):		IR_OEL

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure good ventilation/suction at the workplace.

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:

Protective goggles

Protective eye equipment should conform to EN166.

Skin protection:

Wear protective equipment.

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

pasty black

Odor characteristic

Odour threshold No data available / Not applicable

7 - 8

(; Conc.: 10 %; Solvent: Water)

Melting point No data available / Not applicable Solidification temperature No data available / Not applicable Initial boiling point No data available / Not applicable

> 93,00 °C (> 199.4 °F) Flash point

No data available / Not applicable Evaporation rate No data available / Not applicable Flammability No data available / Not applicable Explosive limits No data available / Not applicable Vapour pressure Relative vapour density: No data available / Not applicable

Density 1,38 g/cm3

(20 °C (68 °F))

Bulk density No data available / Not applicable Solubility No data available / Not applicable

Solubility (qualitative) Insoluble

(20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water No data available / Not applicable Auto-ignition temperature Decomposition temperature Viscosity

(Physica Rheolab; 20 °C (68 °F))

Viscosity (kinematic) Explosive properties Oxidising properties Solid content No data available / Not applicable No data available / Not applicable 120 Pa*s

No data available / Not applicable No data available / Not applicable No data available / Not applicable 97 %

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

General toxicological information:

To the best of our knowledge no harmful effects are to be expected if the product is handled and used properly.

11.1. Information on toxicological effects

Acute oral toxicity:

No data available.

Acute dermal toxicity:

No data available.

Acute inhalative toxicity:

No data available.

Skin corrosion/irritation:

No data available.

Serious eye damage/irritation:
No data available.
Respiratory or skin sensitization:
No data available.
Germ cell mutagenicity:
No data available.
Carcinogenicity
No data available.
Reproductive toxicity:
No data available.
STOT-single exposure:
No data available.
STOT-repeated exposure::
No data available.
Aspiration hazard:
No data available.
SECUTION 12. EI
SECTION 12: Ecological information
General ecological information: Do not empty into drains, soil or bodies of water.
12.1. Toxicity
Toxicity (Fish):
No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Toxicity (Daphnia):

No data available.

Toxicity (Algae):

No data available.

Toxicity to microorganisms

No data available.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or vPvB.

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 10 Waste adhesives and sealants other than those mentioned in 08 04 09.

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

SECTION 15: Regulatory information

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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): Not applicable Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Not applicable Persistent organic pollutants (Regulation (EU) 2019/1021): Not applicable

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC): Not applicable

VOC content 0 % (2010/75/EU)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

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