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

SDS No.: 153925
V008.0
LOCTITE MSC 1000S 250ML
Revision: 28.07.2021
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Replaces version from: 09.06.2021

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

1.1. Product identifier
LOCTITE MSC 1000S 250ML

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use:
Loddemaske

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)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Respiratory sensitizer	Category 1
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:

Contains Rubber, natural

Zinc diethyldithiocarbamate

Signal word: Danger

Hazard statement:
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Supplemental information Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

Precautionary statement: Prevention
P261 Avoid breathing vapors.
P273 Avoid release to the environment.
P280 Wear protective gloves.

Precautionary statement: Response
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

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

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Rubber, natural 9006-04-6	232-689-0	20- 40 %	Resp. Sens. 1 H334 Skin Sens. 1 H317
Titanium dioxide 13463-67-7	236-675-5 01-2119489379-17	1- < 5 %	Carc. 2; Inhalation H351
Zinc diethyldithiocarbamate 14324-55-1	238-270-9 01-2119683928-16	0,1- < 1 %	STOT RE 2 H373 Acute Tox. 4; Oral H302 Eye Irrit. 2 H319 STOT SE 3 H335 Skin Irrit. 2 H315 Skin Sens. 1 H317 Aquatic Chronic 1 H410 Aquatic Acute 1 H400
ammonia, aqueous solution 1336-21-6	215-647-6 01-2119488876-14	0,1- < 0,25 %	Met. Corr. 1 H290 Skin Corr. 1B H314 Aquatic Acute 1 H400 Aquatic Chronic 2 H411 Eye Dam. 1 H318 STOT SE 3 H335 Acute Tox. 4; Oral H302
thiram 137-26-8	205-286-2 01-2119492301-45	0,01- < 0,025 %	Acute Tox. 4; Inhalation H332 Acute Tox. 4; Oral H302 STOT RE 2 H373 Eye Irrit. 2 H319 Skin Sens. 1 H317 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Skin Irrit. 2 H315 M factor (Acute Aquat Tox): 10 M factor (Chron Aquat Tox): 10

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. If symptoms persist, seek medical advice.

Skin contact:
Rinse with running water and soap.
Obtain medical attention if irritation persists.

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

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
SKIN: Rash, Urticaria.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Prolonged or repeated contact may cause eye irritation.

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:
water, carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:
High pressure waterjet

5.2. Special hazards arising from the substance or mixture
In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

5.3. Advice for firefighters
Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information:
In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid contact with skin and eyes.
Ensure adequate ventilation.
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
For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.
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
Avoid skin and eye contact.
See advice in section 8

Hygiene measures:
Good industrial hygiene practices should be observed.
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.
Store in a cool place in closed original container.
Refer to Technical Data Sheet

7.3. Specific end use(s)
Loddemaske

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
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Ammonia, aqueous solution 1336-21-6 [Ammonia, anhydrous]	35	25	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Ammonia, aqueous solution 1336-21-6 [Ammonia, anhydrous]	25	18	Time Weighted Average (TWA):		EH40 WEL
Ammonia, aqueous solution 1336-21-6 [AMMONIA, ANHYDROUS]	50	36	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Ammonia, aqueous solution 1336-21-6 [AMMONIA, ANHYDROUS]	20	14	Time Weighted Average (TWA):	Indicative	ECTLV

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Rubber, natural 9006-04-6 [NATURAL RUBBER LATEX (AS INHALABLE ALLERGENIC PROTEINS)]		0,0001	Time Weighted Average (TWA):		IR_OEL
Rubber, natural 9006-04-6 [NATURAL RUBBER LATEX]		0,0001	Time Weighted Average (TWA):		IR_OEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE]		10	Time Weighted Average (TWA):		IR_OEL
Titanium dioxide 13463-67-7 [TITANIUM DIOXIDE]		4	Time Weighted Average (TWA):		IR_OEL
Ammonia, aqueous solution 1336-21-6 [AMMONIA, ANHYDROUS]	50	36	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
Ammonia, aqueous solution 1336-21-6 [AMMONIA, ANHYDROUS]	20	14	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Ammonia, aqueous solution 1336-21-6 [AMMONIA, ANHYDROUS]	50	36	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Ammonia, aqueous solution 1336-21-6 [AMMONIA, ANHYDROUS]	20	14	Time Weighted Average (TWA):	Indicative	ECTLV
Thiram 137-26-8 [THIRAM (ISO)]		0,05	Time Weighted Average (TWA):		IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Titanium dioxide 13463-67-7	aqua (freshwater)						no hazard identified
Titanium dioxide 13463-67-7	aqua (marine water)						no hazard identified
Titanium dioxide 13463-67-7	sewage treatment plant (STP)						no hazard identified
Titanium dioxide 13463-67-7	sediment (freshwater)						no hazard identified
Titanium dioxide 13463-67-7	sediment (marine water)						no hazard identified
Titanium dioxide 13463-67-7	Soil						no hazard identified
Titanium dioxide 13463-67-7	Aquatic (intermit. releases)						no hazard identified
Titanium dioxide 13463-67-7	Predator						no hazard identified
Zinc bis(diethyldithiocarbamate) 14324-55-1	sewage treatment plant (STP)		14,3 mg/l				
Zinc bis(diethyldithiocarbamate) 14324-55-1	aqua (freshwater)		0,00032 mg/l				
Zinc bis(diethyldithiocarbamate) 14324-55-1	aqua (marine water)		0,000032 mg/l				
Zinc bis(diethyldithiocarbamate) 14324-55-1	sediment (freshwater)				0,473 mg/kg		
Zinc bis(diethyldithiocarbamate) 14324-55-1	Soil				0,0944 mg/kg		
Zinc bis(diethyldithiocarbamate) 14324-55-1	oral				36 mg/kg		
Zinc bis(diethyldithiocarbamate) 14324-55-1	sediment (marine water)				0,0473 mg/kg		
Zinc bis(diethyldithiocarbamate) 14324-55-1	aqua (intermittent releases)		0,0023 mg/l				
ammonia, aqueous solution 1336-21-6	aqua (freshwater)		0,001 mg/l				
ammonia, aqueous solution 1336-21-6	aqua (marine water)		0,001 mg/l				
ammonia, aqueous solution 1336-21-6	aqua (intermittent releases)		0,0068 mg/l				
thiram 137-26-8	aqua (freshwater)		0,00046 mg/l				
thiram 137-26-8	sediment (freshwater)				0,047 mg/kg		
thiram 137-26-8	aqua (marine water)		0,000046 mg/l				
thiram 137-26-8	sediment (marine water)				0,0047 mg/kg		
thiram 137-26-8	Soil				0,00912 mg/kg		
thiram 137-26-8	sewage treatment plant (STP)		0,0311 mg/l				
thiram 137-26-8	oral				0,59 mg/kg		
thiram 137-26-8	aqua (intermittent releases)		0 mg/l				

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Zinc bis(diethyldithiocarbamate) 14324-55-1	Workers	dermal	Long term exposure - systemic effects		500 mg/kg	
Zinc bis(diethyldithiocarbamate) 14324-55-1	Workers	inhalation	Acute/short term exposure - systemic effects		12 mg/m3	
Zinc bis(diethyldithiocarbamate) 14324-55-1	Workers	inhalation	Long term exposure - systemic effects		4 mg/m3	
ammonia, aqueous solution 1336-21-6	Workers	dermal	Acute/short term exposure - systemic effects		6,8 mg/kg	
ammonia, aqueous solution 1336-21-6	Workers	dermal	Long term exposure - systemic effects		6,8 mg/kg	
ammonia, aqueous solution 1336-21-6	Workers	Inhalation	Acute/short term exposure - systemic effects		47,6 mg/m3	
ammonia, aqueous solution 1336-21-6	Workers	Inhalation	Acute/short term exposure - local effects		36 mg/m3	
ammonia, aqueous solution 1336-21-6	Workers	Inhalation	Long term exposure - systemic effects		47,6 mg/m3	
ammonia, aqueous solution 1336-21-6	Workers	Inhalation	Long term exposure - local effects		14 mg/m3	
ammonia, aqueous solution 1336-21-6	General population	dermal	Acute/short term exposure - systemic effects		68 mg/kg	
ammonia, aqueous solution 1336-21-6	General population	dermal	Long term exposure - systemic effects		68 mg/kg	
ammonia, aqueous solution 1336-21-6	General population	Inhalation	Acute/short term exposure - systemic effects		23,8 mg/m3	
ammonia, aqueous solution 1336-21-6	General population	Inhalation	Acute/short term exposure - local effects		7,2 mg/m3	
ammonia, aqueous solution 1336-21-6	General population	Inhalation	Long term exposure - systemic effects		23,8 mg/m3	
ammonia, aqueous solution 1336-21-6	General population	Inhalation	Long term exposure - local effects		2,8 mg/m3	
ammonia, aqueous solution 1336-21-6	General population	oral	Acute/short term exposure - systemic effects		6,8 mg/kg	
ammonia, aqueous solution 1336-21-6	General population	oral	Long term exposure - systemic effects		6,8 mg/kg	
thiram 137-26-8	Workers	inhalation	Long term exposure - systemic effects		0,118 mg/m3	
thiram 137-26-8	Workers	inhalation	Acute/short term exposure - systemic effects		0,564 mg/m3	
thiram 137-26-8	Workers	dermal	Long term exposure - systemic effects		1,6 mg/kg	
thiram 137-26-8	Workers	dermal	Acute/short term exposure - systemic effects		10 mg/kg	

Biological Exposure Indices:
None

8.2. Exposure controls:

Engineering controls:
Ensure good ventilation/extraction.

Respiratory protection:
Ensure adequate ventilation.
An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area
Filter type: A (EN 14387)

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):
nitrile rubber (NBR; >= 0.4 mm thickness)
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 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:
Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.
Protective eye equipment should conform to EN166.

Skin protection:
Wear suitable protective clothing.
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

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 white
Odor	ammoniacal
Odour threshold	No data available / Not applicable
pH (20 °C (68 °F))	7,00 - 9,00
Melting point	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Initial boiling point	100 °C (212 °F)
Flash point	Does not flash.
Evaporation rate	No data available / Not applicable
Flammability	No data available / Not applicable
Explosive limits	No data available / Not applicable
Vapour pressure	Not determined
Relative vapour density:	No data available / Not applicable
Density	0,910 - 0,990 g/cm3

(25,0 °C (77 °F))	
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative)	Miscible
(Solvent: Water)	
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	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
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 properly.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
See section reactivity

10.4. Conditions to avoid
Stable under normal conditions of storage and use.

10.5. Incompatible materials
None if used properly.

SECTION 11: Toxicological information

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
Rubber, natural 9006-04-6	LD50	2.043 - 2.210 mg/kg	rat	not specified
Rubber, natural 9006-04-6	Acute toxicity estimate (ATE)	2.043 mg/kg		Expert judgement
Titanium dioxide 13463-67-7	LD50	> 5.000 mg/kg	rat	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
Zinc diethyldithiocarbamate 14324-55-1	LD50	1.960 mg/kg	mouse	not specified
ammonia, aqueous solution 1336-21-6	LD50	350 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
thiram 137-26-8	LD50	1.800 mg/kg	rat	not specified

Acute dermal 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
Titanium dioxide 13463-67-7	LD50	>= 10.000 mg/kg	hamster	not specified
Zinc diethyldithiocarbamate 14324-55-1	LD50	> 2.000 mg/kg	rabbit	not specified
thiram 137-26-8	LD50	> 2.000 mg/kg	rabbit	EPA OPP 81-2 (Acute Dermal Toxicity)

Acute inhalative 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	Test atmosphere	Exposure time	Species	Method
Titanium dioxide 13463-67-7	LC50	> 6,82 mg/l	dust	4 h	rat	not specified
thiram 137-26-8	LC50	4,42 mg/l	dust/mist	4 h	rat	EPA OPP 81-3 (Acute 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
Titanium dioxide 13463-67-7	not irritating	4 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
ammonia, aqueous solution 1336-21-6	corrosive		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

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 time	Species	Method
Titanium dioxide 13463-67-7	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
ammonia, aqueous solution 1336-21-6	corrosive			not specified
thiram 137-26-8	irritating		rabbit	EPA OPP 81-4 (Acute Eye Irritation)

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
Titanium dioxide 13463-67-7	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
ammonia, aqueous solution 1336-21-6	not sensitising	not specified	guinea pig	not specified
thiram 137-26-8	sensitising	Split adjuvant test	guinea pig	EPA OPP 81-6 (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 administration	Metabolic activation / Exposure time	Species	Method
Titanium dioxide 13463-67-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Titanium dioxide 13463-67-7	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Titanium dioxide 13463-67-7	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
ammonia, aqueous solution 1336-21-6	negative	bacterial reverse mutation assay (e.g Ames test)	not specified		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
thiram 137-26-8	positive	bacterial reverse mutation assay (e.g Ames test)	with and without		EPA OPP 84-2 (Mutagenicity Testing)
thiram 137-26-8	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
thiram 137-26-8	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Titanium dioxide 13463-67-7	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
ammonia, aqueous solution 1336-21-6	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
thiram 137-26-8	negative	oral: gavage		mouse	EU Method B.24 (Mouse Spot Test)
thiram 137-26-8	negative	oral: gavage		mouse	OECD Guideline 483 (Mammalian Spermatogonial Chromosome Aberration Test)
thiram 137-26-8	negative	intraperitoneal		mouse	EPA OPP 84-2 (Mutagenicity Testing)

Carcinogenicity

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

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
Titanium dioxide 13463-67-7	not carcinogenic	inhalation	24 m 6 h/d; 5 d/w	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
ammonia, aqueous solution 1336-21-6	not carcinogenic	oral: feed	104 w daily	rat		OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

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
Titanium dioxide 13463-67-7	NOAEL P > 1.000 mg/kg NOAEL F1 > 1.000 mg/kg		oral: gavage	rat	OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)
ammonia, aqueous solution 1336-21-6	NOAEL P 408 mg/kg	screening	oral: unspecified	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

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
Titanium dioxide 13463-67-7	NOAEL 1.000 mg/kg	oral: gavage	90 d daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
thiram 137-26-8	NOAEL 3,5 - 4 mg/kg	oral: feed	90 d daily	rat	EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Aspiration hazard:

No data available.

SECTION 12: Ecological information

General ecological information:
Do not empty into drains / surface water / ground 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 CAS-No.	Value type	Value	Exposure time	Species	Method
Rubber, natural 9006-04-6	LC50	> 10.000 mg/l	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Titanium dioxide 13463-67-7	LC50	Toxicity > Water solubility	48 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Zinc diethyldithiocarbamate 14324-55-1	LC50	0,23 mg/l	96 h	Oncorhynchus mykiss	EPA-660 (Methods for Acute Toxicity Tests with Fish, Macroinvertebrates and Amphibians)
Zinc diethyldithiocarbamate 14324-55-1	NOEC	0,101 mg/l	33 d	Pimephales promelas	OECD Guideline 210 (fish early lite stage toxicity test)
ammonia, aqueous solution 1336-21-6	LC50	0,16 - 1,1 mg/l	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	OECD Guideline 203 (Fish, Acute Toxicity Test)
ammonia, aqueous solution 1336-21-6	NOEC	< 0,048 mg/l	31 d	Channel catfish	OECD Guideline 215 (Fish, Juvenile Growth Test)
thiram 137-26-8	LC50	0,046 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
thiram 137-26-8	NOEC	0,0046 mg/l	33 d	Pimephales promelas	OECD Guideline 210 (fish early lite stage toxicity test)

Toxicity (Daphnia):

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Titanium dioxide 13463-67-7	EC50	Toxicity > Water solubility	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Zinc diethyldithiocarbamate 14324-55-1	EC50	0,24 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
ammonia, aqueous solution 1336-21-6	EC50	25,4 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
thiram 137-26-8	EC50	0,21 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Zinc diethyldithiocarbamate 14324-55-1	NOEC	0,39 mg/l	21 day	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
ammonia, aqueous solution 1336-21-6	NOEC	0,79 mg/l	96 h	Daphnia magna	EPA OPPTS 850.1300 (Daphnid Chronic Toxicity Test)
thiram 137-26-8	NOEC	0,04 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Titanium dioxide 13463-67-7	EC50	Toxicity > Water solubility	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Zinc diethyldithiocarbamate 14324-55-1	EC50	1,1 mg/l	96 h	Chlorella pyrenoidosa	OECD Guideline 201 (Alga, Growth Inhibition Test)
ammonia, aqueous solution 1336-21-6	EC50	> 1.000 mg/l	72 h	Skeletonema costatum	ISO 10253 (Water quality)
ammonia, aqueous solution 1336-21-6	NOEC	1.000 mg/l	72 h	Skeletonema costatum	ISO 10253 (Water quality)
thiram 137-26-8	EC50	1 mg/l	96 h	Chlorella pyrenoidosa	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Rubber, natural 9006-04-6	EC 50	> 10.000 mg/l			OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Titanium dioxide 13463-67-7	EC0	Toxicity > Water solubility	24 h	Pseudomonas fluorescens	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm-Test)
thiram 137-26-8	EC0	> 200 mg/l			not specified

12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Zinc diethyldithiocarbamate 14324-55-1	not readily biodegradable.	aerobic	2 %	28 day	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
thiram 137-26-8		aerobic	20 - 40 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

12.3. Bioaccumulative potential

No substance data available.
No data available.

12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
Zinc diethyldithiocarbamate 14324-55-1	3,11		QSAR (Quantitative Structure Activity Relationship)
ammonia, aqueous solution 1336-21-6	-1,14		EU Method A.8 (Partition Coefficient)
thiram 137-26-8	1,73	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT/ vPvB
Titanium dioxide 13463-67-7	According to Annex XIII of regulation (EC) 1907/2006 a PBT and vPvB assessment shall not be conducted for inorganic substances.
Zinc diethyldithiocarbamate 14324-55-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
ammonia, aqueous solution 1336-21-6	According to Annex XIII of regulation (EC) 1907/2006 a PBT and vPvB assessment shall not be conducted for inorganic substances.
thiram 137-26-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:
Do not empty into drains / surface water / ground water.
Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:
After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09* waste adhesives and sealants containing organic solvents and other dangerous substances
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.

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 (2010/75/EC)	< 1 %

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:

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel´s Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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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