Safety Data Sheet according to REGULATIONS FOR HAZARDOUS CHEMICAL AGENTS, 2021, published in GG 44348

SDS No. : 820631
V001.1

PATTEX TIN

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

1.1. Product identifier
PATTEX TIN

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

1.3. Details of the supplier of the safety data sheet
Henkel South Africa (PTY) Ltd.
Cnr Bosworth & Potgieter St
1449 Alberton

South Africa

Phone: +27 (116172400)

SDSinfo.Adhesive@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
0800 202 202

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS):

Flammable liquids	Category 2
H225 Highly flammable liquid and vapour.	
Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Specific target organ toxicity - single exposure	Category 3
H336 May cause drowsiness or dizziness.	
Target organ: Central nervous system	
Acute hazards to the aquatic environment	Category 1
H400 Very toxic to aquatic life.	
Chronic hazards to the aquatic environment	Category 1
H410 Very toxic to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (GHS):

Hazard pictogram:

Contains Ethyl acetate

cyclohexane

Signal word: Danger

Hazard statement:
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H410 Very toxic to aquatic life with long lasting effects.

Supplemental information Contains: rosin; Disulfiram May produce an allergic reaction.

Precautionary statement:
P102 Keep out of reach of children.
P101 If medical advice is needed, have product container or label at hand.

Precautionary statement: Prevention
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing mist/vapours.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/eye protection.

Precautionary statement: Disposal
P501 Dispose of contents/container in accordance with national regulation.

2.3. Other hazards

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures.
Pregnant women should absolutely avoid inhalation and skin contact.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Declaration of the ingredients:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Ethyl acetate 141-78-6	205-500-4	20- 40 %	Flam. Liq. 2 H225 STOT SE 3 H336 Eye Irrit. 2 H319
cyclohexane 110-82-7	203-806-2	20- 40 %	Asp. Tox. 1 H304 STOT SE 3 H336 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Flam. Liq. 2 H225 Skin Irrit. 2 H315
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 64742-49-0	921-024-6	10- < 20 %	Flam. Liq. 2 H225 Asp. Tox. 1 H304 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Chronic 2 H411
zinc oxide 1314-13-2	215-222-5	0,25- < 2,5 %	Aquatic Acute 1 H400 Aquatic Chronic 1 H410
rosin 8050-09-7	232-475-7	0,1- < 1 %	Skin Sens. 1 H317
n-Hexane 110-54-3	203-777-6	0,1- < 1 %	Flam. Liq. 2 H225 Repr. 2 H361f Asp. Tox. 1 H304 STOT RE 2 H373 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Chronic 2 H411
Disulfiram 97-77-8	202-607-8	0,1- < 1 %	Acute Tox. 4; Oral H302 Acute Tox. 4; Inhalation H332 Skin Sens. 1 H317 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 STOT RE 2 H373

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:
In case of adverse health effects seek medical advice.

Inhalation:
Move to fresh air, consult doctor if complaint persists.

Skin contact:
Rinse with running water and soap. Skin care. Remove contaminated clothes immediately.

Eye contact:
Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remain (intensive smarting, sensitivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital.

Ingestion:
Rinse mouth, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed
SKIN: Redness, inflammation.

Causes serious eye irritation.

Vapors may cause drowsiness and dizziness.

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:
carbon dioxide, foam, powder, water spray jet, fine water spray

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) and carbon dioxide (CO2) can be released.

5.3. Advice for firefighters
Wear self-contained breathing apparatus.
Wear protective equipment.

Additional information:
Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear protective equipment.
Avoid contact with skin and eyes.
Ensure adequate ventilation.
Danger of slipping on spilled product.

6.2. Environmental precautions
Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up
Remove with liquid-absorbing material (sand, peat, sawdust).
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

During processing and drying after adhesion, ventilate well. Avoid all sources of fire such as stoves and ovens. Switch off all electrical devices such as parabolic heaters, hot plates, storage heaters etc. in good time for them to have cooled down before commencing work. Avoid all sparks, including those occurring at electrical switches and devices.
Ventilate working rooms thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.
Avoid skin and eye contact.

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

Store frost-free.
Close the container carefully after use and store it at a good ventilated place.
Store protected from heat influence.
Keep only in original container.
Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

7.3. Specific end use(s)

Contact adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
South Africa

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Ethyl acetate 141-78-6 [Ethyl acetate]	800		Time Weighted Average (TWA):		ZA REL
Cyclohexane 110-82-7 [Cyclohexane]	200		Time Weighted Average (TWA):		ZA REL
Magnesium oxide 1309-48-4 [Magnesium oxide (as MgO)]		10	Time Weighted Average (TWA):		ZA REL
Zinc oxide 1314-13-2 [Zinc oxide, fume]		20	Short Term Exposure Limit (STEL):		ZA REL
Zinc oxide 1314-13-2 [Zinc oxide, fume]		4	Time Weighted Average (TWA):		ZA REL
n-Hexane 110-54-3 [n-Hexane]	100		Time Weighted Average (TWA):		ZA REL
n-Hexane 110-54-3 [n-Hexane]			Skin designation:	Can be absorbed through the skin.	ZA REL

Occupational Exposure Limits

Valid for
Kenya

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Ethyl acetate 141-78-6 [ETHYL ACETATE]	400	1.400	Time-weighted average (TWA) OEL-RL:		KE OEL-RL
Cyclohexane 110-82-7 [CYCLOHEXANE]	100	340	Time-weighted average (TWA) OEL-RL:		KE OEL-RL
Cyclohexane 110-82-7 [CYCLOHEXANE]	300	1.030	Short-term OEL-RL:		KE OEL-RL
Resin acids and Rosin acids, hydrogenated, esters with glycerol 65997-13-9 [ROSIN CORE SOLDER PYROLYSIS PRODUCTS AS FORMALDEHYDE]		0,3	Short-term OEL-RL:		KE OEL-RL
Resin acids and Rosin acids, hydrogenated, esters with glycerol 65997-13-9 [ROSIN CORE SOLDER PYROLYSIS PRODUCTS AS FORMALDEHYDE]		0,1	Time-weighted average (TWA) OEL-RL:		KE OEL-RL
Magnesium oxide 1309-48-4 [MAGNESIUM OXIDE (AS MG) FUME AND RESPIRABLE DUST]		5	Time-weighted average (TWA) OEL-RL:		KE OEL-RL
Magnesium oxide 1309-48-4 [MAGNESIUM OXIDE (AS MG) FUME AND RESPIRABLE DUST]		10	Short-term OEL-RL:		KE OEL-RL
Magnesium oxide 1309-48-4 [MAGNESIUM OXIDE (AS MG) RESPIRABLE DUST]		10	Time-weighted average (TWA) OEL-RL:		KE OEL-RL
Rosin 8050-09-7		0,3	Short-term OEL-RL:		KE OEL-RL

[ROSIN CORE SOLDER PYROLYSIS PRODUCTS AS FORMALDEHYDE]					
Rosin 8050-09-7 [ROSIN CORE SOLDER PYROLYSIS PRODUCTS AS FORMALDEHYDE]		0,1	Time-weighted average (TWA) OEL-RL:		KE OEL-RL
Zinc oxide 1314-13-2 [ZINC OXIDE, FUME]		10	Short-term OEL-RL:		KE OEL-RL
Zinc oxide 1314-13-2 [ZINC OXIDE, FUME]		5	Time-weighted average (TWA) OEL-RL:		KE OEL-RL
n-Hexane 110-54-3 [N-HEXANE]	20	70	Time-weighted average (TWA) OEL-RL:		KE OEL-RL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Ethyl acetate 141-78-6	aqua (freshwater)		0,24 mg/l				
Ethyl acetate 141-78-6	aqua (marine water)		0,024 mg/l				
Ethyl acetate 141-78-6	aqua (intermittent releases)		1,65 mg/l				
Ethyl acetate 141-78-6	sewage treatment plant (STP)		650 mg/l				
Ethyl acetate 141-78-6	sediment (freshwater)				1,15 mg/kg		
Ethyl acetate 141-78-6	sediment (marine water)				0,115 mg/kg		
Ethyl acetate 141-78-6	Air						no hazard identified
Ethyl acetate 141-78-6	Soil				0,148 mg/kg		
Ethyl acetate 141-78-6	oral				200 mg/kg		
cyclohexane 110-82-7	aqua (freshwater)		0,207 mg/l				
cyclohexane 110-82-7	aqua (marine water)		0,207 mg/l				
cyclohexane 110-82-7	aqua (intermittent releases)		0,207 mg/l				
cyclohexane 110-82-7	sediment (freshwater)				16,68 mg/kg		
cyclohexane 110-82-7	sediment (marine water)				16,68 mg/kg		
cyclohexane 110-82-7	Soil				3,38 mg/kg		
cyclohexane 110-82-7	sewage treatment plant (STP)		3,24 mg/l				
cyclohexane 110-82-7	Air						
cyclohexane 110-82-7	Predator						no potential for bioaccumulation
zinc oxide 1314-13-2	aqua (freshwater)		14,4 µg/l				
zinc oxide 1314-13-2	aqua (marine water)		7,2 µg/l				
zinc oxide 1314-13-2	sewage treatment plant (STP)		100 µg/l				
zinc oxide 1314-13-2	sediment (freshwater)				146,9 mg/kg		
zinc oxide 1314-13-2	sediment (marine water)				162,2 mg/kg		
zinc oxide 1314-13-2	Soil				83,1 mg/kg		
rosin 8050-09-7	aqua (freshwater)		0,002 mg/l				
rosin 8050-09-7	aqua (marine water)		0,0002 mg/l				
rosin 8050-09-7	sediment (freshwater)				0,007 mg/kg		
rosin 8050-09-7	sediment (marine water)				0,001 mg/kg		
rosin 8050-09-7	Soil				0 mg/kg		
rosin 8050-09-7	sewage treatment plant (STP)		1000 mg/l				
rosin 8050-09-7	aqua (intermittent releases)		0,016 mg/l				

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Ethyl acetate 141-78-6	Workers	inhalation	Acute/short term exposure - systemic effects		1468 mg/m3	no hazard identified
Ethyl acetate 141-78-6	Workers	inhalation	Acute/short term exposure - local effects		1468 mg/m3	no hazard identified
Ethyl acetate 141-78-6	Workers	dermal	Long term exposure - systemic effects		63 mg/kg	no hazard identified
Ethyl acetate 141-78-6	Workers	inhalation	Long term exposure - systemic effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	Workers	inhalation	Long term exposure - local effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	Inhalation	Acute/short term exposure - systemic effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	inhalation	Acute/short term exposure - local effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	dermal	Long term exposure - systemic effects		37 mg/kg	no hazard identified
Ethyl acetate 141-78-6	General population	inhalation	Long term exposure - systemic effects		367 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	oral	Long term exposure - systemic effects		4,5 mg/kg	no hazard identified
Ethyl acetate 141-78-6	General population	inhalation	Long term exposure - local effects		367 mg/m3	no hazard identified
cyclohexane 110-82-7	Workers	inhalation	Acute/short term exposure - local effects		700 mg/m3	no potential for bioaccumulation
cyclohexane 110-82-7	Workers	inhalation	Acute/short term exposure - systemic effects		700 mg/m3	no potential for bioaccumulation
cyclohexane 110-82-7	Workers	inhalation	Long term exposure - systemic effects		700 mg/m3	no potential for bioaccumulation
cyclohexane 110-82-7	Workers	inhalation	Long term exposure - local effects		700 mg/m3	no potential for bioaccumulation
cyclohexane 110-82-7	Workers	dermal	Long term exposure - systemic effects		2016 mg/kg	no potential for bioaccumulation
cyclohexane 110-82-7	General population	inhalation	Acute/short term exposure - systemic effects		412 mg/m3	no potential for bioaccumulation
cyclohexane 110-82-7	General population	inhalation	Acute/short term exposure - local effects		412 mg/m3	no potential for bioaccumulation
cyclohexane 110-82-7	General population	dermal	Long term exposure - systemic effects		1186 mg/kg	no potential for bioaccumulation
cyclohexane 110-82-7	General population	oral	Long term exposure - systemic effects		59,4 mg/kg	no potential for bioaccumulation
cyclohexane 110-82-7	General population	inhalation	Long term exposure - systemic effects		206 mg/m3	no potential for bioaccumulation
cyclohexane 110-82-7	General population	inhalation	Long term exposure - local effects		206 mg/m3	no potential for bioaccumulation
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 64742-49-0	Workers	inhalation	Long term exposure - systemic effects		2035 mg/m3	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	Workers	dermal	Long term exposure -		773 mg/kg	

64742-49-0			systemic effects			
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 64742-49-0	General population	inhalation	Long term exposure - systemic effects		608 mg/m3	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 64742-49-0	General population	dermal	Long term exposure - systemic effects		699 mg/kg	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 64742-49-0	General population	oral	Long term exposure - systemic effects		699 mg/kg	
rosin 8050-09-7	Workers	inhalation	Long term exposure - local effects		10 mg/m3	
rosin 8050-09-7	Workers	dermal	Long term exposure - systemic effects		2,131 mg/kg	
rosin 8050-09-7	General population	dermal	Long term exposure - systemic effects		1,065 mg/kg	
rosin 8050-09-7	General population	oral	Long term exposure - systemic effects		1,065 mg/kg	
n-Hexane 110-54-3	General population	inhalation	Long term exposure - systemic effects		16 mg/m3	
n-Hexane 110-54-3	Workers	dermal	Long term exposure - systemic effects		11 mg/kg	
n-Hexane 110-54-3	General population	dermal	Long term exposure - systemic effects		5,3 mg/kg	
n-Hexane 110-54-3	Workers	inhalation	Long term exposure - systemic effects		75 mg/m3	
n-Hexane 110-54-3	General population	oral	Long term exposure - systemic effects		4 mg/kg	

Biological Exposure Indices:

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
n-Hexane 110-54-3 [n-Hexane]	2,5-Hexanedione	Urine	Sampling time: End of shift.	0,4 mg/g	ZA BEI		

None

8.2. Exposure controls:

Respiratory protection:

Suitable breathing mask when there is inadequate ventilation.
Combination filter: ABEKP (EN 14387)
This recommendation should be matched to local conditions.

Hand protection:

Recommended are gloves made from Nitril rubber (Material thickness >0,1 mm, Perforation time < 30s).Gloves should be replaced after each short time contact or contamination. Available at laboratory specialized trade or at pharmacies / chemist's shops.
In the case of longer contact protective gloves made from nitrile rubber are recommended according to EN 374.
material thickness > 0.4 mm
Perforation time > 10 minutes
In the case of longer and repeated contact please note that in practice the penetration times may be considerably shorter than those determined according to EN 374. The protective gloves must always be checked for their suitability for use at the specific workplace (e.g. mechanical and thermal stress, product compatibility, antistatic effects, etc.). The gloves must be replaced immediately at the first signs of wear and tear. The information provided by the manufacturers and given in the relevant trade association regulations for industrial safety must always be observed. We recommend that a hand care plan is drawn up in cooperation with a glove manufacturer and the trade association in accordance with the local operating conditions.

Eye protection:
Goggles which can be tightly sealed.
Protective eye equipment should conform to EN166.

Skin protection:
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	liquid liquid yellow, beige
Odor	characteristic
Odour threshold	No data available / Not applicable
pH (20 °C (68 °F); Conc.: 100 % product)	5 - 7
Melting point	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Initial boiling point	75 °C (167 °F)
Flash point	-24 °C (-11.2 °F); Internal Henkel specification
Evaporation rate	No data available / Not applicable
Flammability	No data available / Not applicable
Explosive limits	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Relative vapour density:	No data available / Not applicable
Density (20 °C (68 °F))	0,860 g/cm3
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative)	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 (; 20 °C (68 °F))	1.800 - 2.300 mPa.s
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 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
None known.

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
Ethyl acetate 141-78-6	LD 50	5,6 g/kg	Rat	
Ethyl acetate 141-78-6	LD 50	0,44 g/kg	Mouse	
cyclohexane 110-82-7	LD 50	29.820 mg/kg	Rat	
cyclohexane 110-82-7	LD 50	1.300 mg/kg	Mouse	
zinc oxide 1314-13-2	LD 50	7.950 mg/kg	Mouse	
zinc oxide 1314-13-2	LD 50	> 5 g/kg	Rat	
n-Hexane 110-54-3	LD 50	28.710 mg/kg	Rat	
Disulfiram 97-77-8	LD 50	2.050 mg/kg	Rabbit	
Disulfiram 97-77-8	LD 50	1.980 mg/kg	Mouse	
Disulfiram 97-77-8	LD 50	500 mg/kg	Rat	

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
n-Hexane 110-54-3	LD 50	> 2.000 mg/kg	Rabbit	
Disulfiram 97-77-8	LD 50	> 2.000 mg/kg	Rabbit	

Acute inhalative toxicity:

The toxicity of the product is due to its narcotic effect after inhalation.
In the event of protracted or repeated exposure, damage to health cannot be excluded.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Ethyl acetate 141-78-6	LC Lo	> 6000 ppm	Vapor	6 h	Rat	
cyclohexane 110-82-7	LC 50	> 32.880 mg/m3	Vapor	4 h	Rat	
cyclohexane 110-82-7	NOAEL	32.880 mg/m3	Vapor		Mouse	
cyclohexane 110-82-7	LC 50	> 5540 ppm	Vapor	4 h	Rat	
zinc oxide 1314-13-2	LOAEL	7,8 mg/m3	Aerosol	3 h	Guinea pig	
zinc oxide 1314-13-2	LOAEL	1 mg/m3	Vapor	1 h	Guinea pig	
zinc oxide 1314-13-2	LC 50	2.500 mg/m3	Inhalation		Mouse	
zinc oxide 1314-13-2	LC 50	> 5.700 mg/m3	Inhalation	4 h	Rat	
n-Hexane 110-54-3	LC 50	> 31,86 mg/l	Vapor	4 h	Rat	
n-Hexane 110-54-3	LC 50	> 5000 ppm	Vapor	24 h	Rat	
n-Hexane 110-54-3	LC 50	73860 ppm	Vapor	4 h	Rat	
Disulfiram 97-77-8	LC 50	> 5,04 mg/l	Aerosol	4 h	Rat	
Disulfiram 97-77-8	LC 50	3,464 mg/l	Aerosol	4 h	Rat	
Disulfiram 97-77-8	LC 50	4,42 mg/l	Aerosol	4 h	Rat	

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.

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.

Toxicity (aquatic invertebrates):

No data available.

Chronic toxicity (aquatic invertebrates):

No data available.

Toxicity (Algae):

No data available.

Toxicity (microorganisms):

No data available.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentration factor (BCF)	Exposure time	Temperature	Species	Method
cyclohexane 110-82-7				Pimephales promelas	
cyclohexane 110-82-7				Cyprinus carpio	
zinc oxide 1314-13-2		28 d	10 °C	Palaemon elegans (crustaceae)	
zinc oxide 1314-13-2				Various	
zinc oxide 1314-13-2		28 d	10 °C	Palaemon elegans (crustaceae)	
zinc oxide 1314-13-2		21 d	10 °C	Echinogammarus pirloti	
zinc oxide 1314-13-2		28 d	10 °C	Palaemon elegans (crustaceae)	
zinc oxide 1314-13-2		28 d	10 °C	Palaemon elegans (crustaceae)	
zinc oxide 1314-13-2		21 d	10 °C	Echinogammarus pirloti	
zinc oxide 1314-13-2		28 d	10 °C	Palaemon elegans (crustaceae)	
zinc oxide 1314-13-2		21 d	10 °C	Echinogammarus pirloti	
zinc oxide 1314-13-2		21 d	10 °C	Echinogammarus pirloti	
zinc oxide 1314-13-2		21 d	10 °C	Echinogammarus pirloti	
zinc oxide 1314-13-2		21 d	10 °C	Echinogammarus pirloti	
zinc oxide 1314-13-2		28 d	10 °C	Palaemon elegans (crustaceae)	
rosin 8050-09-7		20 d	15 °C	Oncorhynchus mykiss	
rosin 8050-09-7		20 d	15 °C	Oncorhynchus mykiss	
rosin 8050-09-7		20 d	15 °C	Oncorhynchus mykiss	
rosin 8050-09-7		20 d	15 °C	Oncorhynchus mykiss	
rosin 8050-09-7		20 d	15 °C	Oncorhynchus mykiss	
rosin 8050-09-7		20 d	15 °C	Oncorhynchus mykiss	
rosin 8050-09-7		20 d	15 °C	Oncorhynchus mykiss	
rosin 8050-09-7		20 d	15 °C	Oncorhynchus mykiss	
rosin 8050-09-7		20 d	15 °C	Oncorhynchus mykiss	
n-Hexane 110-54-3				Pimephales promelas	

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
Ethyl acetate 141-78-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
cyclohexane 110-82-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 64742-49-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
zinc oxide 1314-13-2	According to Annex XIII to Regulation (EC) No 1907/2006, a PBT and vPvB assessment shall not be conducted for inorganic substances.
rosin 8050-09-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
n-Hexane 110-54-3	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:

Dispose of waste and residues in accordance with local authority requirements.

Disposal of uncleaned packages:

Use packages for recycling only when totally empty.

Waste code

080409

SECTION 14: Transport information

14.1. UN number or ID number

ADR	1133
RID	1133
ADN	1133
IMDG	1133
IATA	1133

14.2. UN proper shipping name

ADR	ADHESIVES
RID	ADHESIVES
ADN	ADHESIVES
IMDG	ADHESIVES (Cyclohexane)
IATA	Adhesives

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

14.4. Packing group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	Environmentally Hazardous
RID	Environmentally Hazardous
ADN	Environmentally Hazardous
IMDG	Environmentally Hazardous
IATA	not applicable

14.6. Special precautions for user

ADR	Special provision 640D Tunnelcode: (D/E)
RID	Special provision 640D
ADN	Special provision 640D
IMDG	not applicable
IATA	not applicable

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

No information available:

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

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:

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
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 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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