



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

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sds no. : 76601  
V007.0

TEROKAL 2444 DS 340GR

Revision: 08.04.2013  
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

TEROKAL 2444 DS 340GR

#### 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 AG & Co. KGaA  
Henkelstr. 67  
40589 Düsseldorf

Germany

Phone: +49 (211) 797 0  
Fax-no.: +49 (211) 798 4008

ua-productsafety.de@henkel.com

#### 1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (CLP):

No data available.

##### Classification (DPD):

F - Highly flammable  
R11 Highly flammable.  
Xi - Irritant  
R36/38 Irritating to eyes and skin.  
Dangerous for the environment  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R67 Vapours may cause drowsiness and dizziness.

#### 2.2. Label elements

##### Label elements (CLP):

No data available.

**Label elements (DPD):**

Xi - Irritant



F - Highly flammable



N - Dangerous for the environment



**Risk phrases:**

R36/38 Irritating to eyes and skin.

R11 Highly flammable.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness.

**Safety phrases:**

S2 Keep out of the reach of children.

S16 Keep away from sources of ignition - No smoking.

S24/25 Avoid contact with skin and eyes.

S33 Take precautionary measures against static discharges.

S51 Use only in well-ventilated areas.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains Rosin. May produce an allergic reaction.

**2.3. Other hazards**

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures.

The solvent vapors are heavier than air and may collect in high concentrations at floor level.

**SECTION 3: Composition/information on ingredients**

**General chemical description:**

Adhesive

**Base substances of preparation:**

Polychloroprene

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Cyclohexane 110-82-7	203-806-2 01-2119463273-41	< 30 %	Flammable liquids 2 H225 Specific target organ toxicity - single exposure 3 H336 Skin irritation 2 H315 Acute hazards to the aquatic environment 1 H400 Aspiration hazard 1 H304 Chronic hazards to the aquatic environment 1 H410
Ethyl acetate 141-78-6	205-500-4 01-2119475103-46	< 30 %	Flammable liquids 2 H225 Specific target organ toxicity - single exposure 3 H336 Serious eye irritation 2 H319
Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0	265-151-9	< 20 %	Aspiration hazard 1 H304 Skin irritation 2 H315 Specific target organ toxicity - single exposure 3 H336 Flammable liquids 2 H225 Chronic hazards to the aquatic environment 2 H411
zinc oxide 1314-13-2	215-222-5 01-2119463881-32	< 2,5 %	Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410
Rosin 8050-09-7	232-475-7 01-2119480418-32	< 1 %	Skin sensitizer 1 H317
n-Hexane 110-54-3	203-777-6	< 2,5 %	Flammable liquids 2 H225 Toxic to reproduction 2 H361f Aspiration hazard 1 H304 Specific target organ toxicity - repeated exposure 2 H373 Skin irritation 2 H315 Specific target organ toxicity - single exposure 3 H336 Chronic hazards to the aquatic environment 2 H411

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

**Declaration of ingredients according to DPD (EC) No 1999/45:**

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Cyclohexane 110-82-7	203-806-2 01-2119463273-41	< 30 %	R67 F - Highly flammable; R11 Xn - Harmful; R65 Xi - Irritant; R38 N - Dangerous for the environment; R50/53
Ethyl acetate 141-78-6	205-500-4 01-2119475103-46	< 30 %	F - Highly flammable; R11 R66 Xi - Irritant; R36 R67
Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0	265-151-9	< 20 %	F - Highly flammable; R11 Xi - Irritant; R38 Xn - Harmful; R65 R67 N - Dangerous for the environment; R51/53
zinc oxide 1314-13-2	215-222-5 01-2119463881-32	< 2,5 %	N - Dangerous for the environment; R50/53
Rosin 8050-09-7	232-475-7 01-2119480418-32	< 1 %	R43
n-Hexane 110-54-3	203-777-6	< 2,5 %	F - Highly flammable; R11 Toxic for reproduction - category 3.; R62 Xn - Harmful; R65, R48/20 Xi - Irritant; R38 N - Dangerous for the environment; R51/53 R67

For full text of the R-Phrases indicated by codes 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:**

Fresh air, oxygen supply, warmth; seek specialist medical attention.

**Skin contact:**

Rinse immediately with plenty of running water (for 10 minutes), Remove all contaminated clothing and apply bandage. Seek medical advice.

**Eye contact:**

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

**Ingestion:**

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.  
Seek medical advice, symptomatic treatment.

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

Irritating to eyes.

Irritating to the skin.

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:**

All common extinguishing agents are suitable.

#### **Extinguishing media which must not be used for safety reasons:**

High pressure waterjet

### **5.2. Special hazards arising from the substance or mixture**

In case of fire toxic gases can be released.

### **5.3. Advice for firefighters**

Wear protective equipment.

Wear self-contained breathing apparatus.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective equipment.

Avoid contact with skin and eyes.

Danger of slipping on spilled product.

Keep unprotected persons away.

### **6.2. Environmental precautions**

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

Inform authorities in the event of product spillage to water courses or sewage systems.

### **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 Chapter 13.

### **6.4. Reference to other sections**

See advice in chapter 8

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

Take measures to prevent the build-up of electrostatic charges.

Use explosion-proof equipment.

#### 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.

Store in a cool, frost-free place.

Storage at 10 to 20°C is recommended.

### **7.3. Specific end use(s)**

Contact adhesive

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational Exposure Limits**Valid for  
Germany

Ingredient	ppm	mg/m <sup>3</sup>	Type	Category	Remarks
CYCLOHEXANE 110-82-7	200	700	Time Weighted Average (TWA):	Indicative	ECTLV
Cyclohexane 110-82-7	200	700	AGW:	4	TRGS 900
Cyclohexane 110-82-7			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Ethyl acetate 141-78-6	400	1.500	AGW:	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Ethyl acetate 141-78-6			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900

**Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
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)				3,627 mg/kg		
Cyclohexane 110-82-7	sediment (marine water)				3,627 mg/kg		
Cyclohexane 110-82-7	soil				2,99 mg/kg		
Cyclohexane 110-82-7	STP					3,24 mg/L	
Ethyl acetate 141-78-6	aqua (freshwater)					0,26 mg/L	
Ethyl acetate 141-78-6	aqua (marine water)					0,026 mg/L	
Ethyl acetate 141-78-6	aqua (intermittent releases)					1,65 mg/L	
Ethyl acetate 141-78-6	STP					650 mg/L	
Ethyl acetate 141-78-6	sediment (freshwater)				1,25 mg/kg		
Ethyl acetate 141-78-6	sediment (marine water)				0,125 mg/kg		
Ethyl acetate 141-78-6	oral					200 mg/kg food	
Ethyl acetate 141-78-6	soil				0,24 mg/kg		
Zinc oxide 1314-13-2	aqua (freshwater)					20,6 µg/L	
Zinc oxide 1314-13-2	aqua (marine water)					6,1 µg/L	
Zinc oxide 1314-13-2	STP					52 µg/L	
Zinc oxide 1314-13-2	sediment (freshwater)				117,8 mg/kg		
Zinc oxide 1314-13-2	sediment (marine water)				56,5 mg/kg		
Zinc oxide 1314-13-2	soil				35,6 mg/kg		
Rosin 8050-09-7	aqua (marine water)					0,0005 mg/L	
Rosin 8050-09-7	sediment (freshwater)				108 mg/kg		
Rosin 8050-09-7	sediment (marine water)				10,8 mg/kg		
Rosin 8050-09-7	soil				21,4 mg/kg		
Rosin 8050-09-7	STP					1000 mg/L	

**Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Cyclohexane 110-82-7	worker	inhalation	Acute/short term exposure - local effects		700 mg/m3	
Cyclohexane 110-82-7	worker	inhalation	Acute/short term exposure - systemic effects		700 mg/m3	
Cyclohexane 110-82-7	worker	inhalation	Long term exposure - systemic effects		700 mg/m3	
Cyclohexane 110-82-7	worker	dermal	Long term exposure - systemic effects		2016 mg/kg bw/day	
Cyclohexane 110-82-7	worker	inhalation	Long term exposure - local effects		700 mg/m3	
Cyclohexane 110-82-7	general population	inhalation	Acute/short term exposure - systemic effects		412 mg/m3	
Cyclohexane 110-82-7	general population	inhalation	Acute/short term exposure - local effects		412 mg/m3	
Cyclohexane 110-82-7	general population	dermal	Long term exposure - systemic effects		1186 mg/kg bw/day	
Cyclohexane 110-82-7	general population	inhalation	Long term exposure - systemic effects		206 mg/m3	
Cyclohexane 110-82-7	general population	oral	Long term exposure - systemic effects		59,4 mg/kg bw/day	
Cyclohexane 110-82-7	general population	inhalation	Long term exposure - local effects		206 mg/m3	
Ethyl acetate 141-78-6	worker	inhalation	Acute/short term exposure - systemic effects		1468 mg/m3	
Ethyl acetate 141-78-6	worker	inhalation	Acute/short term exposure - local effects		1468 mg/m3	
Ethyl acetate 141-78-6	worker	dermal	Long term exposure - systemic effects		63 mg/kg	
Ethyl acetate 141-78-6	worker	inhalation	Long term exposure - systemic effects		734 mg/m3	
Ethyl acetate 141-78-6	worker	inhalation	Long term exposure - local effects		734 mg/m3	
Ethyl acetate 141-78-6	general population	inhalation	Acute/short term exposure - systemic effects		734 mg/m3	
Ethyl acetate 141-78-6	general population	inhalation	Acute/short term exposure - local effects		734 mg/m3	
Ethyl acetate 141-78-6	general population	dermal	Long term exposure - systemic effects		37 mg/kg	
Ethyl acetate 141-78-6	general population	inhalation	Long term exposure - systemic effects		367 mg/m3	
Ethyl acetate 141-78-6	general population	oral	Long term exposure - systemic effects		4,5 mg/kg	
Ethyl acetate 141-78-6	general population	inhalation	Long term exposure - local effects		367 mg/m3	
Zinc oxide 1314-13-2	worker	inhalation	Long term exposure - systemic effects		5 mg/m3	
Zinc oxide 1314-13-2	worker	dermal	Long term exposure -		83 mg/kg bw/day	

			systemic effects			
Zinc oxide 1314-13-2	general population	inhalation	Long term exposure - systemic effects		2,5 mg/m3	
Zinc oxide 1314-13-2	general population	dermal	Long term exposure - systemic effects		83 mg/kg bw/day	
Zinc oxide 1314-13-2	general population	oral	Long term exposure - systemic effects		0,83 mg/kg bw/day	
Rosin 8050-09-7	worker	inhalation	Long term exposure - systemic effects		176,32 mg/m3	
Rosin 8050-09-7	general population	inhalation	Long term exposure - systemic effects		52,174 mg/m3	
Rosin 8050-09-7	general population	dermal	Long term exposure - systemic effects		15 mg/kg bw/day	
Rosin 8050-09-7	general population	oral	Long term exposure - systemic effects		15 mg/kg bw/day	

**Biological Exposure Indices:**

Ingredient	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
Cyclohexane 110-82-7	Total 1,2-Cyclohexane diol	Creatinine in urine	Sampling time: End of shift at end of work week.	170 mg/g	DE BAT		
n-Hexane 110-54-3	Hexane-2,5-dione plus 4,5-Dihydroxy-2-hexanone	Urine	Sampling time: End of shift.	5 mg/l	DE BAT		

**8.2. Exposure controls:**

## Engineering controls:

Use only in well ventilated areas.

## Respiratory protection:

Suitable breathing mask when there is inadequate ventilation.

## 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): Isobutylene-isoprene rubber (IIR; >= 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; >= 0.7 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:

Wear tight fitting goggles.

## Skin protection:

Wear protective equipment.  
Protective clothing that covers arms and legs.

## Advices to personal protection equipment:

Use only personal protection that's CE-labelled according to the regulation no. 89/686/EEC of 19 August 1986.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Appearance	liquid liquid beige
Odor	of solvent
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point (1.013 hPa)	63,0 °C (145.4 °F)
Flash point	-25 °C (-13 °F); DIN 51755 Closed cup flash point
Decomposition temperature	> 120,0 °C (> 248 °F)
Vapour pressure (20,0 °C (68 °F))	< 250 hPa
Density (20 °C (68 °F))	0,89 g/cm <sup>3</sup>
Bulk density	No data available / Not applicable
Viscosity (Brookfield; Instrument: RVT; 20,0 °C (68 °F); Spindle No: 4)	3.000 mPa.s
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Partially soluble
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	
lower	1,10 %(V)
upper	11,5 %(V)
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Solid content	29,5 %
Oxidising properties	No data available / Not applicable

**9.2. Other information**

Ignition temperature > 200,0 °C (> 392 °F)

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Reaction with strong acids.  
Reaction with strong oxidants.  
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**

Heat, flames, sparks and other sources of ignition.

**10.5. Incompatible materials**

None if used properly.

**10.6. Hazardous decomposition products**

At higher temperatures acetic acid may be released.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### General toxicological information:

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Vapors may cause drowsiness and dizziness.

#### Skin irritation:

Irritating to the skin.

#### Eye irritation:

Primary eye irritation: irritating

#### Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cyclohexane 110-82-7	LD50	> 5.000 mg/kg	oral		rat	
Ethyl acetate 141-78-6	LD50	6.100 mg/kg	oral		rat	
zinc oxide 1314-13-2	LD50	> 5.000 mg/kg	oral		rat	

#### Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cyclohexane 110-82-7	LC50	13,9 mg/l	inhalation	4 h	rat	
Ethyl acetate 141-78-6	LC50	200 mg/l	inhalation	1 h	rat	

#### Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cyclohexane 110-82-7	LD50	> 2.000 mg/kg	dermal		rabbit	
Ethyl acetate 141-78-6	LD50	> 18.000 mg/kg	dermal		rabbit	
Rosin 8050-09-7	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)

#### Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Ethyl acetate 141-78-6	not irritating	24 h	rabbit	
zinc oxide 1314-13-2	not irritating		rabbit	
Rosin 8050-09-7	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

#### Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Cyclohexane 110-82-7	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Ethyl acetate 141-78-6	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
zinc oxide 1314-13-2	slightly irritating		rabbit	
Rosin 8050-09-7	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
Ethyl acetate 141-78-6	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
zinc oxide 1314-13-2	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

**Germ cell mutagenicity:**

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Cyclohexane 110-82-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Ethyl acetate 141-78-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
zinc oxide 1314-13-2	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Rosin 8050-09-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
n-Hexane 110-54-3	negative	inhalation		rat	

**Repeated dose toxicity**

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Ethyl acetate 141-78-6	NOAEL=900 mg/kg	oral: gavage	90 d daily	rat	
Ethyl acetate 141-78-6	NOAEL=0,002 mg/l	inhalation	90 d continuous	rat	

**SECTION 12: Ecological information****General ecological information:**

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Very toxic to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

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

## 12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Cyclohexane 110-82-7	LC50	55 mg/l	Fish	48 h	Leuciscus idus melanotus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cyclohexane 110-82-7	EC50	3,78 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cyclohexane 110-82-7	EC50	3,32 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethyl acetate 141-78-6	LC50	270 mg/l	Fish	48 h	Leuciscus idus melanotus	
Ethyl acetate 141-78-6	EC50	164 mg/l	Daphnia	48 h	Daphnia cucullata	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Ethyl acetate 141-78-6	EC50	> 2.000 mg/l	Algae	96 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethyl acetate 141-78-6	NOEC	2,4 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
zinc oxide 1314-13-2	LC50	> 1.000 mg/l	Fish		Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
zinc oxide 1314-13-2	EC50	0,17 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Rosin 8050-09-7	LC50	> 1.000 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Rosin 8050-09-7	EC50	911 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Rosin 8050-09-7	EC50	> 100 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	
n-Hexane 110-54-3	LC50	1 - 10 mg/l	Fish			OECD Guideline 203 (Fish, Acute Toxicity Test)
n-Hexane 110-54-3	EC50	2,1 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
n-Hexane 110-54-3	EC50	1 - 10 mg/l	Algae			OECD Guideline 201 (Alga, Growth Inhibition Test)

## 12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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Cyclohexane 110-82-7		aerobic	6 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Ethyl acetate 141-78-6	readily biodegradable	aerobic	100 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Rosin 8050-09-7		aerobic	36 - 46 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
n-Hexane 110-54-3	readily biodegradable	aerobic	> 60 %	

**12.3. Bioaccumulative potential / 12.4. Mobility in soil**

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Cyclohexane 110-82-7		31 - 129		fish		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
Cyclohexane 110-82-7	3,44					
Ethyl acetate 141-78-6	0,6					OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
n-Hexane 110-54-3	4					

**12.5. Results of PBT and vPvB assessment**

Hazardous components CAS-No.	PBT/vPvB
Cyclohexane 110-82-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Ethyl acetate 141-78-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
zinc oxide 1314-13-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Rosin 8050-09-7	Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria

**12.6. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Product disposal:

The valid EEC waste code numbers are not product-related but are largely source-related. These can be requested from the manufacturer.

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

**SECTION 14: Transport information****14.1. UN number**

ADR	1133
RID	1133
ADNR	1133
IMDG	1133
IATA	1133

**14.2. UN proper shipping name**

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

**14.3. Transport hazard class(es)**

ADR	3
	3
RID	3
	3
ADNR	3
	3
IMDG	3
	3
IATA	3
	3

**14.4. Packaging group**

ADR	III
RID	III
ADNR	III
IMDG	III
IATA	III

**14.5. Environmental hazards**

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

**14.6. Special precautions for user**

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

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

VOC content

70,4 %

(VOCV 814.018 VOC regulation  
CH)

**VOC Paints and Varnishes (EU):**

Product (sub)category:

This product is not a subject of the Directive 2004/42/EC

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

**National regulations/information (Germany):**

WGK: 2, water-endangering product. (German VwVwS of July 27, 2005 )  
Classification in conformity with the calculation method

BG regulations, rules, infos: BG data sheet: BGI 621 Solvents

Storage class according to TRGS 510: 3

**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:

R11 Highly flammable.  
R36 Irritating to eyes.  
R38 Irritating to skin.  
R43 May cause sensitisation by skin contact.  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R62 Possible risk of impaired fertility.  
R65 Harmful: may cause lung damage if swallowed.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.  
H225 Highly flammable liquid and vapor.  
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.  
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.