



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

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Tangit PVC-U Special Adhesive

SDS No. : 41762  
V002.5

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

#### 1.1. Product identifier

Tangit PVC-U Special Adhesive

#### Contains:

Tetrahydrofuran  
Butanone  
Cyclohexanone

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

Intended use:  
Pipe 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](mailto: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.

Further information is available at Poison Control Centers.

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification (CLP):**

Flammable liquids	Category 2
H225 Highly flammable liquid and vapor.	
Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye damage	Category 1
H318 Causes serious eye damage.	
Carcinogenicity	Category 2
H351 Suspected of causing cancer.	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	
Target organ: respiratory tract irritation	
Specific target organ toxicity - single exposure	Category 3
H336 May cause drowsiness or dizziness.	
Target organ: Central Nervous System	

**2.2. Label elements****Label elements (CLP):****Hazard pictogram:****Signal word:**

Danger

**Hazard statement:**

H225 Highly flammable liquid and vapor.  
H318 Causes serious eye damage.  
H315 Causes skin irritation.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H351 Suspected of causing cancer.

**Precautionary statement:**

P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260 Do not breathe mist/vapours.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/eye protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor.  
P501 Dispose of waste and residues in accordance with local authority requirements.

**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****General chemical description:**

Adhesive solution

**Base substances of preparation:**Non-plasticized PVC  
in a mixture of organic solvents**Declaration of the ingredients according to CLP (EC) No 1272/2008:**

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Tetrahydrofuran 109-99-9	203-726-8 01-2119444314-46	20- 40 %	Flam. Liq. 2 H225 STOT SE 3 H335 Eye Irrit. 2 H319 Carc. 2 H351
Butanone 78-93-3	201-159-0 01-2119457290-43	20- 40 %	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336
Cyclohexanone 108-94-1	203-631-1 01-2119453616-35	10- < 25 %	Flam. Liq. 3 H226 Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Acute Tox. 4 H332 Eye Dam. 1 H318 Skin Irrit. 2 H315

**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 remains (intensive smarting, sensivity 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**

EYE: Irritation, conjunctivitis.

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

SKIN: Redness, inflammation.

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 (CO<sub>2</sub>) can be released.

Hydrogen chloride.

**5.3. Advice for firefighters**

Wear protective equipment.

Wear self-contained breathing apparatus.

**Additional information:**

Cool endangered containers with water spray jet.

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation.

Do not breathe solvent vapors.

Avoid contact with skin and eyes.

Keep away from sources of ignition.

Wear protective equipment.

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**

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.

Also to be noted when processing larger amounts (> 1 kg): 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.

Avoid skin and eye contact.

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

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**

Store in sealed original container.

Observe German VbF-guideline.

Temperatures between + 5 °C and + 35 °C

Store in a cool place in closed original container.

Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

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

Pipe adhesive

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational Exposure Limits

Valid for  
Germany

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]	50	150	Time Weighted Average (TWA):	Indicative	ECTLV
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]	100	300	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Tetrahydrofuran 109-99-9	50	150	Exposure limit(s):	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Tetrahydrofuran 109-99-9			Skin designation:	Can be absorbed through the skin.	TRGS 900
Tetrahydrofuran 109-99-9			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
Butanone 78-93-3 [BUTANONE]	200	600	Time Weighted Average (TWA):	Indicative	ECTLV
Butanone 78-93-3 [BUTANONE]	300	900	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Butanone 78-93-3			Skin designation:	Can be absorbed through the skin.	TRGS 900
Butanone 78-93-3	200	600	Exposure limit(s):	1 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Butanone 78-93-3			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
Cyclohexanone 108-94-1 [CYCLOHEXANONE]			Skin designation:	Can be absorbed through the skin.	ECTLV
Cyclohexanone 108-94-1 [CYCLOHEXANONE]	10	40,8	Time Weighted Average (TWA):	Indicative	ECTLV
Cyclohexanone 108-94-1 [CYCLOHEXANONE]	20	81,6	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Cyclohexanone 108-94-1			Skin designation:	Can be absorbed through the skin.	TRGS 900
Cyclohexanone 108-94-1	20	80	Exposure limit(s):	1 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Cyclohexanone 108-94-1			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	
Tetrahydrofuran 109-99-9	aqua (freshwater)					4,32 mg/L	
Tetrahydrofuran 109-99-9	aqua (marine water)					0,432 mg/L	
Tetrahydrofuran 109-99-9	aqua (intermittent releases)					21,6 mg/L	
Tetrahydrofuran 109-99-9	STP					4,6 mg/L	
Tetrahydrofuran 109-99-9	sediment (freshwater)					23,3 mg/kg	
Tetrahydrofuran 109-99-9	sediment (marine water)					2,33 mg/kg	
Tetrahydrofuran 109-99-9	soil					2,13 mg/kg	
Tetrahydrofuran 109-99-9	oral					67 mg/kg	
Butanone 78-93-3	aqua (freshwater)					55,8 mg/L	
Butanone 78-93-3	aqua (marine water)					55,8 mg/L	
Butanone 78-93-3	aqua (intermittent releases)					55,8 mg/L	
Butanone 78-93-3	STP					709 mg/L	
Butanone 78-93-3	sediment (freshwater)					284,7 mg/kg	
Butanone 78-93-3	sediment (marine water)					284,7 mg/kg	
Butanone 78-93-3	soil					22,5 mg/kg	
Butanone 78-93-3	oral					1000 mg/kg	
Cyclohexanone 108-94-1	aqua (freshwater)					0,1 mg/L	
Cyclohexanone 108-94-1	aqua (marine water)					0,01 mg/L	
Cyclohexanone 108-94-1	sediment (freshwater)					0,512 mg/kg	
Cyclohexanone 108-94-1	sediment (marine water)					0,0512 mg/kg	
Cyclohexanone 108-94-1	soil					0,0435 mg/kg	
Cyclohexanone 108-94-1	STP					10 mg/L	
Cyclohexanone 108-94-1	aqua (intermittent releases)					1 mg/L	

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Tetrahydrofuran 109-99-9	Workers	Inhalation	Long term exposure - local effects		150 mg/m3	
Tetrahydrofuran 109-99-9	Workers	Inhalation	Long term exposure - systemic effects		150 mg/m3	
Tetrahydrofuran 109-99-9	Workers	Dermal	Long term exposure - systemic effects		25 mg/kg	
Tetrahydrofuran 109-99-9	general population	Inhalation	Long term exposure - systemic effects		62 mg/m3	
Tetrahydrofuran 109-99-9	general population	Dermal	Long term exposure - systemic effects		15 mg/kg	
Tetrahydrofuran 109-99-9	general population	Inhalation	Acute/short term exposure - systemic effects		150 mg/m3	
Tetrahydrofuran 109-99-9	general population	Inhalation	Acute/short term exposure - local effects		150 mg/m3	
Tetrahydrofuran 109-99-9	Workers	Inhalation	Acute/short term exposure - systemic effects		300 mg/m3	
Tetrahydrofuran 109-99-9	Workers	Inhalation	Acute/short term exposure - local effects		300 mg/m3	
Butanone 78-93-3	Workers	Dermal	Long term exposure - systemic effects		1161 mg/kg bw/day	
Butanone 78-93-3	Workers	Inhalation	Long term exposure - systemic effects		600 mg/m3	
Butanone 78-93-3	general population	Dermal	Long term exposure - systemic effects		412 mg/kg bw/day	
Butanone 78-93-3	general population	Inhalation	Long term exposure - systemic effects		106 mg/m3	
Butanone 78-93-3	general population	oral	Long term exposure - systemic effects		31 mg/kg bw/day	
Cyclohexanone 108-94-1	Workers	Inhalation	Acute/short term exposure - systemic effects		80 mg/m3	
Cyclohexanone 108-94-1	Workers	Dermal	Acute/short term exposure - systemic effects		4 mg/kg bw/day	
Cyclohexanone 108-94-1	Workers	Inhalation	Acute/short term exposure - local effects		80 mg/m3	
Cyclohexanone 108-94-1	Workers	Dermal	Long term exposure - systemic effects		4 mg/kg bw/day	
Cyclohexanone 108-94-1	Workers	Inhalation	Long term exposure - systemic effects		40 mg/m3	
Cyclohexanone 108-94-1	Workers	Inhalation	Long term exposure - local effects		40 mg/m3	
Cyclohexanone 108-94-1	general population	Dermal	Acute/short term exposure - systemic effects		1 mg/kg bw/day	
Cyclohexanone 108-94-1	general population	Inhalation	Acute/short term exposure - systemic effects		20 mg/m3	
Cyclohexanone 108-94-1	general population	oral	Acute/short term exposure - systemic effects		1,5 mg/kg food	
Cyclohexanone 108-94-1	general population	Inhalation	Acute/short term exposure - local		40 mg/m3	



			effects			
Cyclohexanone 108-94-1	general population	Dermal	Long term exposure - systemic effects		1 mg/kg bw/day	
Cyclohexanone 108-94-1	general population	Inhalation	Long term exposure - systemic effects		10 mg/m <sup>3</sup>	
Cyclohexanone 108-94-1	general population	oral	Long term exposure - systemic effects		1,5 mg/kg food	
Cyclohexanone 108-94-1	general population	Inhalation	Long term exposure - local effects		20 mg/m <sup>3</sup>	

**Biological Exposure Indices:**

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
Tetrahydrofuran 109-99-9	tetrahydrofuran	Urine	Sampling time: End of shift.	2 mg/l	DE BAT		
Tetrahydrofuran 109-99-9	tetrahydrofuran	Urine	Sampling time: End of shift.	2 mg/l	DE BAT		
Butanone 78-93-3	2-butanone	Urine	Sampling time: End of shift.	5 mg/l	DE BAT		

**8.2. Exposure controls:**

## Respiratory protection:

Suitable breathing mask when there is inadequate ventilation.

Combination filter: ABEKP

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 butyl rubber are recommended according to EN 374.  
material thickness > 0.7 mm

Perforation time > 240 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.

## Skin protection:

Suitable protective clothing

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

Appearance

liquid  
free-flowing, light,  
thixotropic  
colourless, slightly,  
turbid

Odour threshold

No data available / Not applicable

pH

No data available / Not applicable

Initial boiling point

66 °C (150.8 °F)

Flash point

-4 °C (24.8 °F); no method

Decomposition temperature

No data available / Not applicable

Vapour pressure	No data available / Not applicable
Density (20 °C (68 °F))	0,960 g/cm <sup>3</sup>
Bulk density	No data available / Not applicable
Viscosity (Brookfield; 20 °C (68 °F))	7.000 - 15.000 mPa.s
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); 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	1,3 % (V)
upper	12,6 % (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
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

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) are released.

In the event of a fire, hydrochloric acid gas may be released.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

#### STOT-single exposure:

May cause respiratory irritation.

May cause drowsiness or dizziness.

#### 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.

**Skin irritation:**

Causes skin irritation.

**Eye irritation:**

Causes serious eye damage.

**Carcinogenicity:**

Suspected of causing cancer

**Acute oral toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Tetrahydrofuran 109-99-9	LD50	4.430 mg/kg	oral		rat	BASF Test
Butanone 78-93-3	Acute toxicity estimate (ATE)	2.600 mg/kg	oral			Expert judgement
Butanone 78-93-3	LD50	2.600 - 5.400 mg/kg			rat	
Cyclohexanone 108-94-1	LD50	800 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

**Acute inhalative toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Tetrahydrofuran 109-99-9	Acute toxicity estimate (ATE)	5,1 mg/l	Aerosol			Expert judgement
Tetrahydrofuran 109-99-9	LC50	> 5000 ppm	inhalation		rat	EPA Guideline
Butanone 78-93-3	Acute toxicity estimate (ATE)	5,1 mg/l	Aerosol			Expert judgement
Butanone 78-93-3	LC50	> 5000 ppm		6 h	rat	

**Acute dermal toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Tetrahydrofuran 109-99-9	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)
Butanone 78-93-3	Acute toxicity estimate (ATE)	6.400 mg/kg	dermal			Expert judgement
Butanone 78-93-3	LD50	6.400 - 8.000 mg/kg			rabbit	

**Skin corrosion/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Tetrahydrofuran 109-99-9	not irritating	72 h	rabbit	Draize Test
Butanone 78-93-3	moderately irritating		rabbit	
Cyclohexanone 108-94-1	corrosive		rabbit	

**Serious eye damage/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Butanone 78-93-3	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Cyclohexanone 108-94-1	irritating		rabbit	

**Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
Tetrahydrofuran 109-99-9	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Butanone 78-93-3	not sensitising	Guinea pig maximisation test	guinea pig	

**Germ cell mutagenicity:**

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Tetrahydrofuran 109-99-9	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Tetrahydrofuran 109-99-9	negative	inhalation: vapour		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Butanone 78-93-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cyclohexanone 108-94-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		

**Carcinogenicity:**

Hazardous components CAS-No.	Result	Species	Sex	Exposure time Frequency of treatment	Route of application	Method
Tetrahydrofuran 109-99-9	carcinogenic	mouse	male/female	105 w 5 d/w	inhalation: vapour	

**Repeated dose toxicity**

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Tetrahydrofuran 109-99-9		inhalation: vapour	14 w 5 d/w	rat	
Tetrahydrofuran 109-99-9	NOAEL=1.000 mg/l	oral: drinking water	4 w	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
Butanone 78-93-3	NOAEL=2500 ppm	inhalation	90 days 6 hours/day, 5 days/week	rat	
Butanone 78-93-3	LOAEL=5000 ppm	inhalation	90 days 6 hours/day, 5 days/week	rat	

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

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.  
Do not empty into drains, soil or bodies of water.

**12.1. Toxicity**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Tetrahydrofuran 109-99-9	NOEC	216 mg/l	Fish	33 d	Pimephales promelas	
	LC50	2.160 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Tetrahydrofuran 109-99-9	EC50	3.485 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Butanone 78-93-3	LC50	3.220 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Butanone 78-93-3	EC50	5.091 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Butanone 78-93-3	EC50	> 1.000 mg/l	Algae			OECD Guideline 201 (Alga, Growth Inhibition Test)
Cyclohexanone 108-94-1	LC50	619 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cyclohexanone 108-94-1	EC50	820 mg/l	Daphnia	24 h	Daphnia magna	
Cyclohexanone 108-94-1	EC50	> 370 mg/l	Algae	8 d	Scenedesmus quadricauda	OECD Guideline 201 (Alga, Growth Inhibition Test)

**12.2. Persistence and degradability**

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Tetrahydrofuran 109-99-9	readily biodegradable	aerobic	99 %	OECD Guideline 301 A (old version) (Ready Biodegradability: Modified AFNOR Test)
Butanone 78-93-3	readily biodegradable	aerobic	> 60 %	OECD 301 A - F
Cyclohexanone 108-94-1	readily biodegradable	aerobic	77 %	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)

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

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Tetrahydrofuran 109-99-9	0,45				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Butanone 78-93-3	0,29					
Cyclohexanone 108-94-1	0,86				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

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

Hazardous components CAS-No.	PBT/vPvB

Tetrahydrofuran 109-99-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Butanone 78-93-3	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

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

**SECTION 14: Transport information****14.1. UN 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
IATA	Adhesives

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

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

**14.4. Packaging group**

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

**14.5. Environmental hazards**

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
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. 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 77,57 %  
(VOCV 814.018 VOC regulation  
CH)

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

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

WGK:	1, slightly water-endangering product. (German VwVwS of May 17, 1999 ) Classification in conformity with the calculation method
Storage class according to TRGS 510:	3
General remarks (DE):	This product is in scope of the German regulation "ChemikalienVerbotsVerordnung"



## 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 vapor.
- H226 Flammable liquid and vapor.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer.

### 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.

### Label elements (DPD):

F - Highly flammable

Xn - Harmful



### Risk phrases:

- R11 Highly flammable.
- R37/38 Irritating to respiratory system and skin.
- R40 Limited evidence of a carcinogenic effect.
- R41 Risk of serious damage to eyes.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

### Safety phrases:

- S2 Keep out of the reach of children.
- S9 Keep container in a well-ventilated place.
- S16 Keep away from sources of ignition - No smoking.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- S51 Use only in well-ventilated areas.

### Contains:

Tetrahydrofuran

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