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

sds no. : 41762
V002.1

Tangit PVC-U Special Adhesive

Revision: 08.08.2013
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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

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
40191 Düsseldorf

Germany

Phone: +49 (211) 797-0

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.

The product is notified at the 'Information Centers for Cases of Poisoning in Germany'. These centers provide information by telephone day and night in poisoning cases. Central emergency phone number: ++49 (0) 30 19240

SECTION 2: Hazards identification

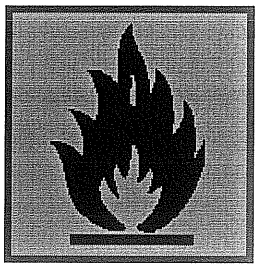
2.1. Classification of the substance or mixture

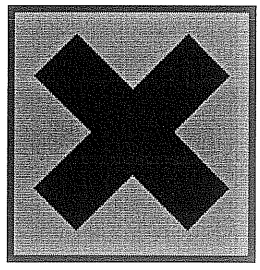
Classification (DPD):
F - Highly flammable
R11 Highly flammable.
Xn - Harmful
carcinogenic, category 3
R40 Limited evidence of a carcinogenic effect.
Xi - Irritant
R37/38 Irritating to respiratory system and skin.
R41 Risk of serious damage to eyes.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

2.2. Label elements

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

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

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	25- < 30 %	Flammable liquids 2 H225 Specific target organ toxicity - single exposure 3 H335 Serious eye irritation 2 H319 Carcinogenicity 2 H351
Butanone 78-93-3	201-159-0 01-2119457290-43	25- < 30 %	Flammable liquids 2 H225 Specific target organ toxicity - single exposure 3 H336 Serious eye irritation 2 H319
Cyclohexanone 108-94-1	203-631-1	20- < 25 %	Flammable liquids 3 H226 Acute toxicity 4; Oral H302 Acute toxicity 4; Dermal H312 Acute toxicity 4 H332 Serious eye damage 1 H318 Skin irritation 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.

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Tetrahydrofuran 109-99-9	203-726-8 01-2119444314-46	25 - < 30 %	F - Highly flammable; R11, R19 Xi - Irritant; R36/37 carcinogenic, category 3; R40
Butanone 78-93-3	201-159-0 01-2119457290-43	25 - < 30 %	F - Highly flammable; R11 R67 Xi - Irritant; R36 R66
Cyclohexanone 108-94-1	203-631-1	20 - < 25 %	R10 Xn - Harmful; R20/21/22 Xi - Irritant; R38, R41

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

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 and throat. Drink 1-2 glasses of water. Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed
Risk of serious damage to eyes

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

Limited evidence of a carcinogenic effect (carcinogenic category 3).

Repeated exposure may cause skin dryness or cracking.

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.
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 Chapter 13.

6.4. Reference to other sections
See advice in chapter 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 a cool place in closed original container.
Temperatures between + 5 °C and + 35 °C
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	ppm	mg/m³	Type	Category	Remarks
TETRAHYDROFURAN 109-99-9	50	150	Time Weighted Average (TWA):	Indicative	ECTLV
TETRAHYDROFURAN 109-99-9	100	300	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Tetrahydrofuran 109-99-9	50	150	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
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	300	900	Short Term Exposure Limit (STEL):	Indicative	ECTLV
BUTANONE 78-93-3	200	600	Time Weighted Average (TWA):	Indicative	ECTLV
Butanone 78-93-3	200	600	AGW:	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			Skin designation:	Can be absorbed through the skin.	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			Skin designation:	Can be absorbed through the skin.	ECTLV
CYCLOHEXANONE 108-94-1	10	40,8	Time Weighted Average (TWA):	Indicative	ECTLV
CYCLOHEXANONE 108-94-1	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	AGW:	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		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Tetrahydrofuran 109-99-9	worker	inhalation	Long term exposure - local effects		150 mg/m3	
Tetrahydrofuran 109-99-9	worker	inhalation	Long term exposure - systemic effects		150 mg/m3	
Tetrahydrofuran 109-99-9	worker	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	worker	inhalation	Acute/short term exposure - systemic effects		300 mg/m3	
Tetrahydrofuran 109-99-9	worker	inhalation	Acute/short term exposure - local effects		300 mg/m3	
Butanone 78-93-3	worker	dermal	Long term exposure - systemic effects		1161 mg/kg bw/day	
Butanone 78-93-3	worker	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	

Biological Exposure Indices:

Ingredient	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		
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/cm3
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 (CO2) 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 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.

Inhalative toxicity:
The toxicity of the product is due to its narcotic effect after inhalation.
Vapors may cause drowsiness and dizziness.
Irritating to respiratory system

Skin irritation:
Primary skin irritation: irritating
Repeated exposure may cause skin dryness or cracking.

Eye irritation:
Risk of serious damage to eyes

Carcinogenicity:
Limited evidence of a carcinogenic effect

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	
Tetrahydrofuran 109-99-9	LD50	4.430 mg/kg			rat	
Butanone 78-93-3	LD50	2.600 - 5.400 mg/kg	oral		rat	
Butanone 78-93-3	LD50	2.600 - 5.400 mg/kg			rat	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Tetrahydrofuran 109-99-9	LC50	> 5000 ppm	inhalation		rat	
Tetrahydrofuran 109-99-9	LC50	> 5000 ppm			rat	
Butanone 78-93-3	LC50	> 5000 ppm	inhalation	6 h	rat	
Butanone 78-93-3	LC50	> 5000 ppm		6 h	rat	
Cyclohexanone 108-94-1	LC50	> 6,2 mg/l	inhalation	4 h	rat	
Cyclohexanone 108-94-1	LC50	> 6,2 mg/l		4 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)
Tetrahydrofuran 109-99-9	LD50	> 2.000 mg/kg			rat	OECD Guideline 402 (Acute Dermal Toxicity)
Butanone 78-93-3	LD50	6.400 - 8.000 mg/kg	dermal		rabbit	
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	
Tetrahydrofuran 109-99-9	not irritating	72 h	rabbit	
Butanone 78-93-3	moderately irritating		rabbit	
Butanone 78-93-3	moderately irritating		rabbit	
Cyclohexanone 108-94-1	corrosive		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)
Butanone 78-93-3	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Cyclohexanone 108-94-1	irritating		rabbit	
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)
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	
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)
	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)
	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)
	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		
	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequency of treatment	Route of application	Method
Tetrahydrofuran 109-99-9		mouse	male/female	105 w 5 d/w	inhalation: vapour	
Tetrahydrofuran 109-99-9		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	NOAEL=1.000 mg/l	oral: drinking water	4 w	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
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	NOAEL=2500 ppm	inhalation	90 days 6 hours/day, 5 days/week	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.

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	LC50	2.160 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
	NOEC	216 mg/l	Fish	33 d	Pimephales promelas	
	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)
	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)
	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)
	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)
	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)
	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	
	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)
	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 Biodegradabiltiy: Modified AFNOR Test)
	readily biodegradable	aerobic	99 %	OECD Guideline 301 A (old version) (Ready Biodegradabiltiy: Modified AFNOR Test)
Butanone 78-93-3	readily biodegradable	aerobic	> 60 %	
	readily biodegradable	aerobic	> 60 %	
Cyclohexanone 108-94-1	readily biodegradable	aerobic	88 %	EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test)
	readily biodegradable	aerobic	88 %	EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening 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)
	0,45				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Butanone 78-93-3	0,29					
	0,29					
Cyclohexanone 108-94-1	0,86				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
	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
ADNR	1133
IMDG	1133
IATA	1133

14.2. UN proper shipping name

ADR	ADHESIVES
RID	ADHESIVES
ADNR	ADHESIVES
IMDG	ADHESIVES
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	II
RID	II
ADNR	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADNR	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
ADNR	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:

R10 Flammable.
R11 Highly flammable.
R19 May form explosive peroxides.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R36 Irritating to eyes.
R36/37 Irritating to eyes and respiratory system.
R38 Irritating to 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.
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.