



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

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Tangit PVC-U Special Adhesive

sds no. : 41762

V001.15

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1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Tangit PVC-U Special Adhesive

Relevant identified uses of the substance or mixture and uses advised against:

Intended use:

Pipe adhesive

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

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

2. Hazards identification

Classification of the substance or mixture:

Classification (DPD):

F - Highly flammable

R11 Highly flammable.

Xi - Irritant

R36/37 Irritating to eyes and respiratory system.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

Label elements (DPD):

F - Highly flammable

Xi - Irritant

**Risk phrases:**

- R11 Highly flammable.
- R36/37 Irritating to eyes and respiratory system.
- 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.
- S25 Avoid contact with eyes.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- S51 Use only in well-ventilated areas.

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 breathe in and skin contact.

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	25- < 30 %	Flammable liquids 2 H225 Specific target organ toxicity - single exposure 3 H335 Serious eye irritation 2 H319
Butanone 78-93-3	201-159-0	25- < 30 %	Flammable liquids 2 H225 Specific target organ toxicity - single exposure 3 H336 Serious eye irritation 2 H319 EUH066
Cyclohexanone 108-94-1	203-631-1	20- < 25 %	Acute toxicity 4; Inhalation H332 Flammable liquids 3 H226

**Only dangerous ingredients for which a CLP classification is already available are displayed in this table.
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	25 - < 30 %	F - Highly flammable; R11, R19 Xi - Irritant; R36/37
Butanone 78-93-3	201-159-0	25 - < 30 %	F - Highly flammable; R11 R67 Xi - Irritant; R36 R66
Cyclohexanone 108-94-1	203-631-1	20 - < 25 %	Xn - Harmful; R20 R10

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.

4. First aid measures

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.

Most important symptoms and effects, both acute and delayed:

EYE: Irritation, conjunctivitis.

Repeated exposure may cause skin dryness or cracking.

Vapors may cause drowsiness and dizziness.

Indication of any immediate medical attention and special treatment needed:

See section: Description of first aid measures

5. Firefighting measures

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

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.

Advice for firefighters:

Wear protective equipment.

Wear self-contained breathing apparatus.

Additional information:

Cool endangered containers with water spray jet.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.
Keep away from sources of ignition.
Wear protective equipment.
Danger of slipping on spilled product.

Environmental precautions:

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

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.

Reference to other sections:

See advice in chapter 8

7. Handling and storage

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.

Hygiene measures:

Do not breathe solvent vapors.
Avoid skin and eye contact.
Do not eat, drink or smoke while working.
Wash hands before work breaks and after finishing work.

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.).

Specific end use(s):

Pipe adhesive

8. Exposure controls/personal protection

Control parameters:

Valid for

Germany

Basis

Germany - Occupational Exposure Limits

Ingredient	ppm	mg/m3	Type	Category	Remarks
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
TETRAHYDROFURAN 109-99-9			Skin designation:	Can be absorbed through the skin.	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	100	300	Short Term Exposure Limit (STEL):	Indicative	ECTLV
TETRAHYDROFURAN 109-99-9	50	150	Time Weighted Average (TWA):	Indicative	ECTLV
CYCLOHEXANONE 108-94-1			Skin designation:	Can be absorbed through the skin.	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
CYCLOHEXANONE 108-94-1	20	81,6	Short Term Exposure Limit (STEL):	Indicative	ECTLV
CYCLOHEXANONE 108-94-1	10	40,8	Time Weighted Average (TWA):	Indicative	ECTLV
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
Butanone 78-93-3			Skin designation:	Can be absorbed through the skin.	TRGS 900
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	200	600	Time Weighted Average (TWA):	Indicative	ECTLV
BUTANONE 78-93-3	300	900	Short Term Exposure Limit (STEL):	Indicative	ECTLV

Exposure controls:

Respiratory protection:

Suitable breathing mask when there is inadequate ventilation.

Filter A1-A3 (brown)

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.

Eye protection:

Goggles which can be tightly sealed.

Skin protection:

Suitable protective clothing

9. Physical and chemical properties

Information on basic physical and chemical properties:

Appearance	liquid free-flowing, light, thixotropic colourless, slightly, turbid
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 ³
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

Other information:

No data available / Not applicable

10. Stability and reactivity

Reactivity:

None if used for intended purpose.

Chemical stability:

Stable under recommended storage conditions.

Possibility of hazardous reactions:

See section reactivity

Conditions to avoid:

None if used for intended purpose.

Incompatible materials:

None if used properly.

Hazardous decomposition products:

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

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO₂) are released.**11. Toxicological information****General toxicological information:**

In the event of protracted or repeated exposure, damage to health cannot be excluded.

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.

Skin irritation:

Primary skin irritation: irritating

Eye irritation:

Primary eye irritation: irritating

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Butanone 78-93-3	LD50 LC50 LD50	2.600 - 5.400 mg/kg > 5000 ppm 6.400 - 8.000 mg/kg	oral inhalation dermal	6 h	rat rat rabbit	
Cyclohexanone 108-94-1	LC50	> 6,2 mg/l	inhalation	4 h	rat	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
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	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Cyclohexanone 108-94-1	not irritating		rabbit	

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
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	bacterial forward mutation assay	with and without		
Butanone 78-93-3	negative	bacterial forward mutation assay	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cyclohexanone 108-94-1	negative	bacterial forward mutation assay	with and without		

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Butanone 78-93-3	NOAEL=2500 ppm	inhalation	90 days 6 hours/day, 5 days/week	rat	

12. Ecological information**General ecological information:**

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

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.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Tetrahydrofuran 109-99-9	LC50	2.820 mg/l	Fish	48 h	Leuciscus idus	
Tetrahydrofuran 109-99-9	EC50	5.930 mg/l	Daphnia	24 h		
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)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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Tetrahydrofuran 109-99-9		aerobic	77 %	EU Method C.4-B (Determination of the "Ready" Biodegradability Modified OECD Screening Test)
Butanone 78-93-3	readily biodegradable	aerobic	> 60 %	
Cyclohexanone 108-94-1	readily biodegradable	aerobic	88 %	EU Method C.4-B (Determination of the "Ready" Biodegradability Modified OECD Screening Test)

Bioaccumulative potential / 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)

13. Disposal considerations**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

14. Transport information**Road transport ADR:**

Class: 3
Packaging group: II
Classification code: F1
Hazard ident. number: 33
UN no.: 1133
Label: 3
Technical name: ADHESIVES
Tunnelcode: (D/E)
Additional information: Special provision 640D

Railroad transport RID:

Class: 3
Packaging group: II
Classification code: F1
Hazard ident. number: 33
UN no.: 1133
Label: 3
Technical name: ADHESIVES
Tunnelcode:
Additional information: Special provision 640D

Inland water transport ADN:

Class:	3
Packaging group:	II
Classification code:	F1
Hazard ident. number:	
UN no.:	1133
Label:	3
Technical name:	ADHESIVES
Additional information:	Special provision 640D

Marine transport IMDG:

Class:	3
Packaging group:	II
UN no.:	1133
Label:	3
EmS:	F-E ,S-D
Seawater pollutant:	-
Proper shipping name:	ADHESIVES

Air transport IATA:

Class:	3
Packaging group:	II
Packaging instructions (passenger)	305
Packaging instructions (cargo)	307
UN no.:	1133
Label:	3
Proper shipping name:	Adhesives

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

VOC content	54,7 %
(VOCV 814.018 VOC regulation CH)	

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 VCI:	3

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 Harmful by inhalation.
R36 Irritating to eyes.
R36/37 Irritating to eyes and respiratory system.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

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.