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

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V003.0
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Tangit PVC-U Special Adhesive (formerly known as Tangit ALL PRESSURE)

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

1.1. Product identifier
Tangit PVC-U Special Adhesive (formerly known as Tangit ALL PRESSURE)

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 Ltd
Wood Lane End
HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000
Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

1.4. Emergency telephone number
24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY- Email: technical.services@henkel.co.uk

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
H336 May cause drowsiness or dizziness.	
Target organ: Central Nervous System	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	
Target organ: respiratory tract irritation	
Acute toxicity	Category 4
H302 Harmful if swallowed.	
Route of Exposure: Oral	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:

Signal word: Danger

Hazard statement:
H225 Highly flammable liquid and vapor.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
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 contents/container in accordance with national regulation.

2.3. Other hazards

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures.
Pregnant women should absolutely avoid inhalation and skin contact.
Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

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 Acute Tox. 4; Oral H302
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:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

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

4.2. Most important symptoms and effects, both acute and delayed
Vapors may cause drowsiness and dizziness.

INGESTION: Nausea, vomiting, diarrhea, abdominal pain.

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

SKIN: Redness, inflammation.

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.
Avoid contact with skin and eyes.
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.
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.

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 rules and measures for storage of flammable liquids.
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
Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]	100	300	Short Term Exposure Limit (STEL):		EH40 WEL
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]	50	150	Time Weighted Average (TWA):		EH40 WEL
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
Butanone 78-93-3 [BUTAN-2-ONE (METHYL ETHYL KETONE)]	300	899	Short Term Exposure Limit (STEL):		EH40 WEL
Butanone 78-93-3 [BUTAN-2-ONE (METHYL ETHYL KETONE)]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Butanone 78-93-3 [BUTAN-2-ONE (METHYL ETHYL KETONE)]	200	600	Time Weighted Average (TWA):		EH40 WEL
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
Cyclohexanone 108-94-1 [CYCLOHEXANONE]			Skin designation:	Can be absorbed through the skin.	ECTLV
Cyclohexanone 108-94-1 [CYCLOHEXANONE]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Cyclohexanone 108-94-1 [CYCLOHEXANONE]	20	82	Short Term Exposure Limit (STEL):		EH40 WEL
Cyclohexanone 108-94-1 [CYCLOHEXANONE]	10	41	Time Weighted Average (TWA):		EH40 WEL
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
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5		6	Time Weighted Average (TWA):		EH40 WEL

[SILICA, AMORPHOUS, INHALABLE DUST]					
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]	50	150	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]	100	300	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]			Skin designation:	Can be absorbed through the skin.	IR_OEL
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
Butanone 78-93-3 [METHYL ETHYL KETONE (MEK)]	200	600	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Butanone 78-93-3 [METHYL ETHYL KETONE (MEK)]	300	900	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Butanone 78-93-3 [METHYL ETHYL KETONE (MEK)]			Skin designation:	Can be absorbed through the skin.	IR_OEL
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
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 OELV	IR_OEL
Cyclohexanone 108-94-1 [CYCLOHEXANONE]	20	81,6	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Cyclohexanone 108-94-1 [CYCLOHEXANONE]			Skin designation:	Can be absorbed through the skin.	IR_OEL
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
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE (PVC), RESPIRABLE DUST]		1	Time Weighted Average (TWA):		IR_OEL
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE (PVC), TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, TOTAL INHALABLE DUST]		6	Time Weighted Average (TWA):		IR_OEL

Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		IR_OEL

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	sewage treatment plant (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	sewage treatment plant (STP)		709 mg/l				
Butanone 78-93-3	sediment (freshwater)				284,74 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)		0,0329 mg/l				
Cyclohexanone 108-94-1	aqua (marine water)		0,01 mg/l				
Cyclohexanone 108-94-1	sediment (freshwater)				0,095 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	sewage treatment plant (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	
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	
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	
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	
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	
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	

Cyclohexanone 108-94-1	General population	Inhalation	Acute/short term exposure - local effects		40 mg/m3	
Cyclohexanone 108-94-1	General population	dermal	Long term exposure - systemic effects		1 mg/kg	
Cyclohexanone 108-94-1	General population	Inhalation	Long term exposure - systemic effects		10 mg/m3	
Cyclohexanone 108-94-1	General population	oral	Long term exposure - systemic effects		1,5 mg/kg	
Cyclohexanone 108-94-1	General population	Inhalation	Long term exposure - local effects		20 mg/m3	

Biological Exposure Indices:
None

8.2. Exposure controls:

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

Hand protection:
Recommended are gloves made from Nitril rubber (Material thickness >0,1 mm, Perforation time < 30s).Gloves should be replaced after each short time contact or contamination. Available at laboratory specialized trade or at pharmacies / chemist's shops.
In the case of longer contact protective gloves made from 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.
Protective eye equipment should conform to EN166.

Skin protection:
Suitable protective clothing
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:
The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions.
Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid 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	0,960 g/cm3
(20 °C (68 °F))	
Bulk density	No data available / Not applicable
Viscosity	7.000 - 15.000 mPa.s
(Brookfield; 20 °C (68 °F))	
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative)	Partially soluble
(20 °C (68 °F); Solvent: Water)	
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
None known

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 (EC) No 1272/2008. 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.

Oral toxicity:
Harmful if swallowed.

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	1.650 mg/kg	oral		rat	not specified
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	LC50	> 5000 ppm		6 h	rat	not specified
Cyclohexanone 108-94-1	LC50	11 mg/l	vapour	4 h	rat	not specified

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	LD50	6.400 - 8.000 mg/kg	dermal		rabbit	not specified
Cyclohexanone 108-94-1	LD50	1.100 mg/kg	dermal		rabbit	not specified

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	not specified
Cyclohexanone 108-94-1	corrosive		rabbit	not specified

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	not specified

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	not specified

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 reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration 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)
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		not specified

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequency of treatment	Route of application	Method
Tetrahydrofuran 109-99-9	carcinogenic	mouse	male/female	105 w 5 d/w	inhalation: vapour	not specified

Reproductive toxicity:

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
Tetrahydrofuran 109-99-9	NOAEL P = 9000 ppm NOAEL F1 = 3000 ppm NOAEL F2 = 3000 ppm	Two generation study oral: drinking water		rat	not specified

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 w5 d/w	rat	not specified
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 days6 hours/day, 5 days/week	rat	not specified
Butanone 78-93-3	LOAEL=5000 ppm	inhalation	90 days6 hours/day, 5 days/week	rat	not specified

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 (EC) No 1272/2008. 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)
Butanone 78-93-3	EC 50	> 1.000 mg/l	Bacteria			OECD Guideline 209 (Activated Sludge, Respiration 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	not specified
Cyclohexanone 108-94-1	EC50	> 370 mg/l	Algae	8 d	Scenedesmus quadricauda	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cyclohexanone 108-94-1	EC10	180 mg/l	Bacteria	16 h		not specified

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)
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" BiodegradabilityClosed Bottle Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components CAS-No.	LogPow	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					not specified
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. Packing 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 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 (VOCV 814.018 VOC regulation CH)	77,57 %

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text
of all abbreviations indicated by codes in this safety data sheet are as follows:

H225 Highly flammable liquid and 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.

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.

Annex - Exposure Scenarios:

Exposure Scenarios for butanone (MEK) can be downloaded under the following link:
http://mymsds.henkel.com/mymsds/.547033..en.ANNEX_DE.25417830.0.DE.pdf
Alternatively they can be accessed on the internet site www.mymsds.henkel.com by entering number 547033.