



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

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TANGIT DTX

SDS No. : 509572
V003.0

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

1.1. Product identifier

TANGIT DTX

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

Intended use:

Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

ua-productsafety.uk@henkel.com

For Safety Data Sheet updates please visit our website <https://mysds.henkel.com/index.html#/appSelection> or www.henkel-adhesives.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.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
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	
Carcinogenicity	Category 2
H351 Suspected of causing cancer.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:**Contains**

tetrahydrofuran

Butanone

Signal word:

Danger

Hazard statement:

H225 Highly flammable liquid and vapor.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H351 Suspected of causing cancer.

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.

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.
 P501 Dispose of waste and residues in accordance with local authority requirements.

2.3. Other hazards

Pregnant women should absolutely avoid inhalation and skin contact.

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

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

Following substances are present in a concentration $\geq 0,1\%$ and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in concentration \geq the concentration limit that are assessed to be a PBT, vPvB or ED.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

Hazardous components CAS-No. EC Number REACH-Reg No.	Concentration	Classification	Specific Conc. Limits, M-factors and ATEs	Add. Information
tetrahydrofuran 109-99-9 203-726-8 01-2119444314-46	40- 60 %	STOT SE 3, H336 Flam. Liq. 2, H225 STOT SE 3, H335 Eye Irrit. 2, H319 Carc. 2, H351 Acute Tox. 4, Oral, H302	Eye Irrit. 2; H319; C >= 25 % STOT SE 3; H335; C >= 25 % ===== inhalation:ATE = > 14,7 mg/l;vapour	EU OEL
Butanone 78-93-3 201-159-0 01-2119457290-43	20- 40 %	STOT SE 3, H336 Eye Irrit. 2, H319 Flam. Liq. 2, H225		EU OEL

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 remain (intensive smarting, sensitivity 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

Causes serious eye irritation.

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

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 self-contained breathing apparatus.
Wear protective equipment.

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.
Do not breathe solvent vapors.
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.
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.
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)

Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
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	ECLTV
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]	100	300	Short Term Exposure Limit (STEL):	Indicative	ECLTV
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]	100	300	Short Term Exposure Limit (STEL):	15 minutes	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	ECLTV
Butanone 78-93-3 [BUTANONE]	300	900	Short Term Exposure Limit (STEL):	Indicative	ECLTV
Butanone 78-93-3 [BUTAN-2-ONE (METHYL ETHYL KETONE)]	300	899	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Polyvinyl chloride 9002-86-2 [Polyvinyl chloride, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Polyvinyl chloride 9002-86-2 [Polyvinyl chloride, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Tetrahydrofuran	50	150	Time Weighted Average	Indicative OELV	IR_OEL

109-99-9 [TETRAHYDROFURAN]			(TWA):		
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
Tetrahydrofuran 109-99-9 [TETRAHYDROFURAN]	100	300	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
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)]			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
Butanone 78-93-3 [METHYL ETHYL KETONE (MEK)]	300	900	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE (PVC)]		1	Time Weighted Average (TWA):		IR_OEL
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE (PVC)]		10	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS]		2,4	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [DUSTS NON-SPECIFIC]		10	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [DUSTS NON-SPECIFIC]		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		
tetrahydrofuran 109-99-9	Air						no hazard identified
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		

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 - systemic effects		72,4 mg/m ³	no hazard identified
tetrahydrofuran 109-99-9	Workers	dermal	Long term exposure - systemic effects		12,6 mg/kg	no hazard identified
tetrahydrofuran 109-99-9	General population	Inhalation	Long term exposure - systemic effects		13 mg/m ³	no hazard identified
tetrahydrofuran 109-99-9	General population	dermal	Long term exposure - systemic effects		1,5 mg/kg	no hazard identified
tetrahydrofuran 109-99-9	General population	Inhalation	Acute/short term exposure - systemic effects		52 mg/m ³	no hazard identified
tetrahydrofuran 109-99-9	General population	Inhalation	Acute/short term exposure - local effects		150 mg/m ³	no hazard identified
tetrahydrofuran 109-99-9	Workers	Inhalation	Acute/short term exposure - systemic effects		96 mg/m ³	no hazard identified
tetrahydrofuran 109-99-9	Workers	Inhalation	Acute/short term exposure - local effects		300 mg/m ³	no hazard identified
tetrahydrofuran 109-99-9	Workers	inhalation	Long term exposure - local effects		150 mg/m ³	no hazard identified
tetrahydrofuran 109-99-9	General population	inhalation	Long term exposure - local effects		75 mg/m ³	no hazard identified
tetrahydrofuran 109-99-9	General population	oral	Long term exposure - systemic effects		1,5 mg/kg	no hazard identified
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/m ³	
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/m ³	
Butanone 78-93-3	General population	oral	Long term exposure - systemic effects		31 mg/kg	

Biological Exposure Indices:

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
Butanone 78-93-3 [BUTAN-2-ONE]	Butan-2-one	Urine	Sampling time: End of shift.		UKEH40BMG V		

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**

Physical state	liquid
Delivery form	liquid
Colour	colourless
Odor	intensive, of ester and keton
Solidification temperature	-86 °C (-122.8 °F)
Initial boiling point	66,0 °C (150.8 °F)no method
Flammability	flammable
Explosive limits	
lower	1,5 %(V); No data available.
upper	12,6 %(V); No data available.
Flash point	-20 °C (-4 °F); no method
Auto-ignition temperature	475 °C (887 °F)
pH	Not applicable, Product is non-soluble (in water).
Viscosity (kinematic) (40 °C (104 °F);)	8.400 - 14.700 mm ² /s
Viscosity, dynamic (Brookfield; Instrument: LVT; 20 °C (68 °F); speed of rotation: 30 min-1; Spindle No: 4)	8.000 - 14.000 mPa.s DIN EN 12092
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Partially soluble
Solubility (qualitative) (20 °C (68 °F); Solvent: ketones)	Partially soluble
Solubility (qualitative) (20 °C (68 °F); Solvent: other organic solvents)	Partially soluble
Vapour pressure (50 °C (122 °F))	612 mbar
Density	0,95 g/cm ³ DIN EN 542

(23 °C (73.4 °F))
 Relative vapour density: 1,25
 (20 °C)

9.2. Other information

Other information not applicable for this product

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

1.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
tetrahydrofuran 109-99-9	LD50	1.650 mg/kg	rat	not specified
Butanone 78-93-3	LD50	2.737 mg/kg	rat	not specified

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
tetrahydrofuran 109-99-9	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Butanone 78-93-3	LD50	> 6.400 mg/kg	rabbit	not specified

Acute 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.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
tetrahydrofuran 109-99-9	LC50	> 14,7 mg/l	vapour	6 h	rat	EPA Guideline
tetrahydrofuran 109-99-9	Acute toxicity estimate (ATE)	> 14,7 mg/l	vapour	4 h		Expert judgement
Butanone 78-93-3	LC50	> 20 mg/l	vapour	4 h	rat	not specified

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
tetrahydrofuran 109-99-9	not irritating	72 h	rabbit	Draize Test
Butanone 78-93-3	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Butanone 78-93-3	irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
tetrahydrofuran 109-99-9	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Butanone 78-93-3	not sensitising	Buehler test	guinea pig	equivalent or similar to OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances 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		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
tetrahydrofuran 109-99-9	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
tetrahydrofuran 109-99-9	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Butanone 78-93-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Butanone 78-93-3	negative	in vitro mammalian chromosome aberration test	not applicable		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Butanone 78-93-3	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
tetrahydrofuran 109-99-9	negative	inhalation: vapour		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Butanone 78-93-3	negative	intraperitoneal		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
tetrahydrofuran 109-99-9	carcinogenic	inhalation: vapour	105 w 6 h/d, 5 d/w	mouse	female	not specified

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	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	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
Butanone 78-93-3	NOAEL P 10.000 mg/l NOAEL F1 10.000 mg/l	two-generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
tetrahydrofuran 109-99-9	NOAEL 1.000 mg/l	oral: drinking water	4 w daily	rat	equivalent or similar to 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	not specified

Aspiration hazard:

The mixture is classified based on Viscosity data.

Hazardous substances CAS-No.	Viscosity (kinematic) Value	Temperature	Method	Remarks
Butanone 78-93-3	0,51 mm ² /s	20 °C	ASTM Standard D7042	

11.2 Information on other hazards

not applicable

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

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

12.1. Toxicity**Toxicity (Fish):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
tetrahydrofuran 109-99-9	NOEC	216 mg/l	33 d	Pimephales promelas	OECD Guideline 210 (fish early lite stage toxicity test)
tetrahydrofuran 109-99-9	LC50	2.160 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Butanone 78-93-3	LC50	3.220 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
tetrahydrofuran 109-99-9	EC50	3.485 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Butanone 78-93-3	EC50	5.091 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

No data available.

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
tetrahydrofuran 109-99-9	NOEC	3.700 mg/l		Scenedesmus quadricauda	other guideline:
Butanone 78-93-3	EC50	2.029 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Butanone 78-93-3	EC10	1.289 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
tetrahydrofuran 109-99-9	IC50	460 mg/l	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Butanone 78-93-3	EC50	1.150 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)

12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
tetrahydrofuran 109-99-9	inherently biodegradable	aerobic	61 %	52 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Butanone 78-93-3	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	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	0,3	40 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances 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. Endocrine disrupting properties

not applicable

12.7. 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
080409

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. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

No information available:

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):	Not applicable
Persistent organic pollutants (Regulation (EU) 2019/1021):	Not applicable

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.
 H302 Harmful if swallowed.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H351 Suspected of causing cancer.

ED:	Substance identified as having endocrine disrupting properties
EU OEL:	Substance with a Union workplace exposure limit
EU EXPLD 1:	Substance listed in Annex I, Reg (EC) No. 2019/1148
EU EXPLD 2	Substance listed in Annex II, Reg (EC) No. 2019/1148
SVHC:	Substance of very high concern (REACH Candidate List)
PBT:	Substance fulfilling persistent, bioaccumulative and toxic criteria
PBT/vPvB:	Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very bioaccumulative criteria
vPvB:	Substance fulfilling very persistent and very bioaccumulative criteria

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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:
<https://mysds.henkel.com/index.html#/appSelection>