

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

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

1.1. Product identifier

LOCTITE FREKOTE PMC

LOCTITE FREKOTE PMC

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

Intended use:

Solvent cleaner

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

Germany

Phone: +49 211 797 0

ua-productsafety.de@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

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Flammable liquids Category 2

H225 Highly flammable liquid and vapour.

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye irritation Category 2

H319 Causes serious eye irritation.

Toxic to reproduction Category 2

H361d Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure Category 3

H336 May cause drowsiness or dizziness.

Target organ: Central nervous system

Specific target organ toxicity - repeated exposure Category 2

H373 May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Category 1

H304 May be fatal if swallowed and enters airways.

Chronic hazards to the aquatic environment Category 3

H412 Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Contains Toluene

Butanone

Signal word: Danger

Hazard statement: H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement:

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P261 Avoid breathing vapors.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing.

Precautionary statement: Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P337+P313 If eye irritation persists: Get medical advice/attention.

P331 Do NOT induce vomiting.

2.3. Other hazards

None if used properly.

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

Following substances are present in a concentration >= 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 ≥ 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
Toluene 108-88-3 203-625-9 01-2119471310-51	50- 100 %	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, Inhalation, H373 Skin Irrit. 2, H315 STOT SE 3, Inhalation, H336 Aquatic Chronic 3, H412		EU OEL
Butanone 78-93-3 201-159-0 01-2119457290-43	25- 50 %	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. Declaration of ingredients according to Detergent Regulation 648/2004/EC

The preparation does not contain any ingredients to be labelled according to this regulation.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Obtain medical attention if irritation persists.

Rinse with running water and soap.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

ASPIRATION: Coughing, shortness of breath, nausea. Delayed effect: bronchopneumonia or pulmonary oedema

SKIN: Redness, inflammation.

EYE: Irritation, conjunctivitis.

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

Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

Do not induce vomiting.

Seek medical attention from a specialist.

SECTION 5: Firefighting measures

5.1. Extinguishing media Suitable extinguishing media:

Carbon dioxide, foam, powder

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

Can form explosive gas/air mixtures.

5.3. Advice for firefighters

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective equipment.

Avoid contact with skin and eyes.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Dispose of contaminated material as waste according to Section 13.

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Keep away from sources of ignition - no smoking.

Prolonged or repeated skin contact should be avoided

Avoid spraying/aerosol generation.

Avoid skin and eye contact.

See advice in section 8

Hygiene measures:

Good industrial hygiene practices should be observed.

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

Store in sealed original container.

Store in a cool, well-ventilated place.

Keep away from sources of ignition.

Do not expose to direct sunlight.

Refer to Technical Data Sheet

7.3. Specific end use(s)

Solvent cleaner

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Germany

Ingredient [Regulated substance]	redient [Regulated substance] ppm mg/m³ Value type		Short term exposure limit category / Remarks	Regulatory list	
Toluene 108-88-3 [TOLUENE]	50	192	Time Weighted Average (TWA):	Indicative	ECTLV
Toluene 108-88-3 [TOLUENE]	100	384	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Toluene 108-88-3			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Toluene 108-88-3			Skin designation:	Can be absorbed through the skin.	TRGS 900
Toluene 108-88-3	50	190	Exposure limit(s):	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 [BUTANONE]	200	600	Time Weighted Average (TWA):	Indicative	ECTLV
Butanone 78-93-3 [BUTANONE]	300	900	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Butanone 78-93-3			Skin designation:	Can be absorbed through the skin.	TRGS 900
Butanone 78-93-3	200	600	Exposure limit(s):	I If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Butanone 78-93-3			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900

$\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period	Value		Remarks		
	•		mg/l	ppm	mg/kg	others	
Toluene	aqua		0,68 mg/l				
108-88-3	(freshwater)						
Toluene	sediment				16,39		
108-88-3	(freshwater)				mg/kg		
Toluene	sediment				16,39		
108-88-3	(marine water)				mg/kg		
Toluene	Soil				2,89 mg/kg		
108-88-3							
Toluene	sewage		13,61 mg/l				
108-88-3	treatment plant						
	(STP)						
Toluene	aqua (marine		0,68 mg/l				
108-88-3	water)						
Toluene	aqua		0,68 mg/l				
108-88-3	(intermittent						
	releases)						
Butanone	aqua		55,8 mg/l				
78-93-3	(freshwater)						
Butanone	aqua (marine		55,8 mg/l				
78-93-3	water)						
Butanone	aqua		55,8 mg/l				
78-93-3	(intermittent						
	releases)						
Butanone	sewage		709 mg/l				
78-93-3	treatment plant						
	(STP)						
Butanone	sediment				284,74		
78-93-3	(freshwater)				mg/kg		
Butanone	sediment				284,7		
78-93-3	(marine water)				mg/kg		
Butanone	Soil				22,5 mg/kg		
78-93-3							
Butanone	oral				1000		
78-93-3					mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Toluene 108-88-3	Workers	Inhalation	Acute/short term exposure - local effects		384 mg/m3	
Toluene 108-88-3	Workers	Inhalation	Acute/short term exposure - systemic effects		384 mg/m3	
Toluene 108-88-3	Workers	Inhalation	Long term exposure - local effects		192 mg/m3	
Toluene 108-88-3	Workers	Inhalation	Long term exposure - systemic effects		192 mg/m3	
Toluene 108-88-3	Workers	dermal	Long term exposure - systemic effects		384 mg/kg	
Toluene 108-88-3	General population	Inhalation	Acute/short term exposure - local effects		226 mg/m3	
Toluene 108-88-3	General population	Inhalation	Acute/short term exposure - systemic effects		226 mg/m3	
Toluene 108-88-3	General population	Inhalation	Long term exposure - systemic effects		56,5 mg/m3	
Toluene 108-88-3	General population	dermal	Long term exposure - systemic effects		226 mg/kg	
Toluene 108-88-3	General population	oral	Long term exposure - systemic effects		8,13 mg/kg	
Toluene 108-88-3	General population	inhalation	Long term exposure - local effects		56,5 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	

Biological Exposure Indices:

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	 Additional Information
Toluene 108-88-3	toluene	Blood	Sampling time period is immediately after exposure.	600 μg/l	DE BGW	
Toluene 108-88-3 [TOLUENE]	o-Cresol, with hydrolysis	Urine	Sampling time period is for long-term exposures, at the end of the shift after several preceding ones./ Sampling time period is at end of exposure or at end of shift.	1,5 mg/l	DE BGW	
Toluene 108-88-3 [TOLUENE]	toluene	Urine	Sampling time: End of shift.	75 μg/l	DE BGW	
Butanone 78-93-3 [2-Butanone; Methylethylketone]	2-butanone	Urine	Sampling time: End of shift.	150 mg/l	DE BGW	

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. Protective eye equipment should conform to EN166.

Skin protection:

Wear 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 of aromatic solvent

Melting point Currently under determination Initial boiling point 79,0 - 110,0 °C (174.2 - 230 °F)

(1.013 hPa)

Flammability Currently under determination

Explosive limits

Auto-ignition temperature

Decomposition temperature

lower 1,2 %(V); No data available.

upper 8,0%(V);

Flash point 0 °C (32 °F); HST-US E39F; PENSKY-MARTENS

CLOSED CUP FLASH POINT Currently under determination Currently under determination

pH Not applicable

Viscosity (kinematic) Currently under determination

Solubility (qualitative) Soluble

(20 °C (68 °F); Solvent: other organic

solvents)

Solubility (qualitative) Slightly soluble

(Solvent: Water)

Partition coefficient: n-octanol/water Currently under determination

Vapour pressure 267 mbar

Density 0,712 g/cm3 no method

(20 °C (68 °F))

Relative vapour density: Heavier than air

Particle characteristics Currently under determination

9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

Reaction with strong oxidants.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable under normal conditions of storage and use.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

Hydrocarbons

At higher temperature carbon oxides and nitrogen oxides may be generated.

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	Value	Value	Species	Method
CAS-No.	type			
Toluene	LD50	5.580 mg/kg	rat	EU Method B.1 (Acute Toxicity (Oral))
108-88-3				• • • • • • • • • • • • • • • • • • • •
Butanone	LD50	2.737 mg/kg	rat	not specified
78-93-3				•

Acute dermal toxicity:

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

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Toluene	LD50	> 5.000 mg/kg	rabbit	not specified
108-88-3				
Butanone	LD50	> 6.400 mg/kg	rabbit	not specified
78-93-3				•

Acute inhalative toxicity:

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

Hazardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
Toluene 108-88-3	LC50	28,1 mg/l	vapour	4 h	rat	equivalent or similar to OECD Guideline 403 (Acute Inhalation Toxicity)
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	Result	Exposure	Species	Method
CAS-No.		time		
Toluene	irritating	4 h	rabbit	EU Method B.4 (Acute Toxicity: Dermal Irritation /
108-88-3				Corrosion)
Butanone	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
78-93-3				

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
Toluene 108-88-3	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
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	Result	Test type	Species	Method
CAS-No.				
Toluene	not sensitising	Guinea pig maximisation	guinea pig	EU Method B.6 (Skin Sensitisation)
108-88-3		test		
Butanone	not sensitising	Buehler test	guinea pig	equivalent or similar to OECD Guideline
78-93-3				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
Toluene 108-88-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
Toluene 108-88-3	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to 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)
Toluene 108-88-3	negative	intraperitoneal		rat	not specified
Toluene 108-88-3	negative	inhalation: vapour		mouse	OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal 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
Toluene 108-88-3	not carcinogenic	inhalation: vapour	103 w 6.5 h/d, 5 d/w	rat	male/female	equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

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
Toluene 108-88-3	NOAEL P 7500 mg/m3 NOAEL F1 1875 mg/m3 NOAEL F2 1875 mg/m3	Two generation study	inhalation: vapour	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
Toluene 108-88-3	NOAEL P 2261 mg/m3 NOAEL F1 2261 mg/m3	fertility	inhalation: vapour	rat	not specified
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
Toluene 108-88-3	NOAEL 625 mg/kg	oral: gavage	13 w daily, 5 d/w	rat	EU Method B.26 (Sub- Chronic Oral Toxicity Test: Repeated Dose 90- Day Oral Toxicity Study in Rodents)
Toluene 108-88-3	NOAEL 1131 mg/m3	inhalation: vapour	24 m 6.5 h/d, 5 d/w	rat	equivalent or similar to OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Toluene 108-88-3	NOAEL 2355 mg/m3	inhalation: vapour	15 w 6.5 h/d, 5 d/w	rat	EU Method B.29 (Sub- Chronic Inhalation Toxicity Test:90-Day Repeated Inhalation Dose Study Using Rodent Species)
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
Toluene 108-88-3	0,57 mm2/s	40 °C	not specified	
Butanone 78-93-3	0,51 mm2/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 / surface water / ground 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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Toluene	NOEC	3,2 mg/l	28 d	Cyprinodon variegatus	OECD Guideline 204 (Fish,
108-88-3					Prolonged Toxicity Test:
					14-day Study)
Toluene	LC50	5,5 mg/l	96 h	Oncorhynchus kisutch	OECD Guideline 203 (Fish,
108-88-3					Acute Toxicity Test)
Butanone	LC50	3.220 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish,
78-93-3					Acute Toxicity Test)

Toxicity (Daphnia):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Toluene	EC50	3,78 mg/l	48 h	Ceriodaphnia dubia	other guideline:
108-88-3					
Butanone	EC50	5.091 mg/l	48 h	Daphnia magna	OECD Guideline 202
78-93-3					(Daphnia sp. Acute
					Immobilisation Test)

Chronic toxicity to aquatic invertebrates

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
Toluene	NOEC	0,74 mg/l	7 d	Ceriodaphnia dubia	other guideline:
108-88-3				_	_

Toxicity (Algae):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Toluene	IC50	12 mg/l	72 h	Selenastrum capricornutum	OECD Guideline 201 (Alga,
108-88-3				(new name: Pseudokirchneriella	Growth Inhibition Test)
				subcapitata)	
Butanone	EC50	2.029 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
78-93-3				_	Growth Inhibition Test)
Butanone	EC10	1.289 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
78-93-3				_	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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Toluene	NOEC	29 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8
108-88-3					(Pseudomonas
					Zellvermehrungshemm-
					Test)
Butanone	EC50	1.150 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8
78-93-3				_	(Pseudomonas
					Zellvermehrungshemm-
					Test)

12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Toluene 108-88-3	readily biodegradable	aerobic	80 %	20 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

Hazardous substances	Bioconcentratio	Exposure time	Temperature	Species	Method
CAS-No.	n factor (BCF)				
Toluene	90	3 d		Leuciscus idus	OECD Guideline 305
108-88-3				melanotus	(Bioconcentration: Flow-through
					Fish Test)

12.4. Mobility in soil

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Toluene	2,73	20 °C	EU Method A.8 (Partition Coefficient)
108-88-3			
Butanone	0,3	40 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
78-93-3			Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Toluene	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
108-88-3	Bioaccumulative (vPvB) criteria.
Butanone	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
78-93-3	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:

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

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

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

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information

14.1. UN number

ADR	1993
RID	1993
ADN	1993
IMDG	1993
IATA	1993

14.2. UN proper shipping name

ADR	FLAMMABLE LIQUID, N.O.S. (Toluene, Methyl ethyl ketone)
RID	FLAMMABLE LIQUID, N.O.S. (Toluene, Methyl ethyl ketone)
ADN	FLAMMABLE LIQUID, N.O.S. (Toluene, Methyl ethyl ketone)
IMDG	FLAMMABLE LIQUID, N.O.S. (Toluene, Methyl ethyl ketone)
IATA	Flammable liquid, n.o.s. (Toluene, Methyl ethyl ketone)

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

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

VOC content (2010/75/EC)

100 %

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

National regulations/information (Germany):

WGK: WGK 2: significantly water endangering (Ordinance on facilities for handling

substances that are hazardous to water (AwSV)) Classification according to AwSV, Annex 1 (5.2)

BG regulations, rules, infos:

BG data sheet: BGI 621 Solvents

BG data sheet: BGI 660 General Occupational Safety Measures for

handling hazardous substances (M 053)

Storage class according to TRGS 510: 3

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 vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

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.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your_company.com).

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