

TEROSON VR 5000 AE

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

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SDS No.: 76942 V011.1

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

1.1. Product identifier

TEROSON VR 5000 AE

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

Intended use: Spray adhesive

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

SDSinfo.Adhesive@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 aerosols Category 1

H222 Extremely flammable aerosol.

H229 Pressurized container: May burst if heated.

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye irritation Category 2

H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure Category 3

H336 May cause drowsiness or dizziness.

Target organ: Central nervous system

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 Methyl acetate

Signal word: Danger

Hazard statement: H222 Extremely flammable aerosol.

H229 Pressurized container: May burst if heated.

H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement: P102 Keep out of reach of children.

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

Prevention No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use. P261 Avoid breathing mist/vapours. P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement: Response

P370+P378 In case of fire: Use CO2, dry chemical, or foam for extinction.

Precautionary statement:

Storage

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

2.3. Other hazards

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

The solvent vapors are heavier than air and may collect in high concentrations at floor level.

The aerosol container is under pressure. Do not expose to high temperatures.

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	Concentration	Classification	Specific Conc. Limits, M- factors and ATEs	Add. Information
REACH-Reg No. Methyl acetate 79-20-9 201-185-2 01-2119459211-47	20- 40 %	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336		
Isobutane 75-28-5 200-857-2 01-2119485395-27	20- 40 %	Flam. Gas 1A, H220 Press. Gas Liquef. Gas, H280		
Propane 74-98-6 200-827-9 01-2119486944-21	10- 20 %	Flam. Gas 1A, H220 Press. Gas H280		
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n- hexane 92128-66-0 926-605-8 01-2119486291-36	1-< 5 %	Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411		
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 921-024-6 01-2119475514-35	1- < 3 %	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411		
Ethyl acetate 141-78-6 205-500-4 01-2119475103-46	1-< 3 %	Flam. Liq. 2, H225 STOT SE 3, H336 Eye Irrit. 2, H319		EU OEL
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0 927-510-4 01-2119475515-33	1-< 3 %	Asp. Tox. 1, H304 Skin Irrit. 2, H315 Flam. Liq. 2, H225 STOT SE 3, Inhalation, H336 Aquatic Chronic 2, H411	inhalation:ATE = 23,31 mg/l;	
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0 931-254-9 01-2119484651-34	1- < 3 %	Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Flam. Liq. 2, H225 Aquatic Chronic 2, H411		
Butyl hydroxytoluene 128-37-0 204-881-4 01-2119565113-46	0,1-< 0,25 %	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M acute = 1 M chronic = 1	

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

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

IF ON SKIN: Wash with plenty of soap and water. In case of adverse health effects seek medical advice.

Eye contact:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion:

not relevant.

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

EYE: Irritation, conjunctivitis.

Vapors may cause drowsiness and dizziness.

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

Extinguishing media which must not be used for safety reasons:

Water jet (solvent-containing product).

5.2. Special hazards arising from the substance or mixture

In case of fire toxic gases can be released.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment.

Avoid contact with skin and eyes.

Keep unprotected persons away.

Danger of slipping on spilled product.

6.2. Environmental precautions

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

Inform authorities in the event of product spillage to water courses or sewage systems.

6.3. Methods and material for containment and cleaning up

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

Avoid open flames and sources of ignition.

Ground/bond container and receiving equipment.

Use explosion proof electric equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Hygiene measures:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work. Take off contaminated clothing and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

The storage regulations for aerosols apply. Ensure good ventilation/extraction. Store in a cool place. Keep away from heat and direct sunlight.

Storage at 5 to 25°C is recommended.

7.3. Specific end use(s)

Spray adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for Germany

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Methyl acetate 79-20-9	200	620	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
Methyl acetate 79-20-9			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
Isobutane 75-28-5			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Isobutane 75-28-5	1.000	2.400	Exposure limit(s):	4	TRGS 900
Propane 74-98-6	1.000	1.800	Exposure limit(s):	4	TRGS 900
Propane 74-98-6			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Ethyl acetate 141-78-6 [ETHYL ACETATE]	200	734	Time Weighted Average (TWA):	Indicative	ECTLV
Ethyl acetate 141-78-6 [ETHYL ACETATE]	400	1.468	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Ethyl acetate 141-78-6			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
Ethyl acetate 141-78-6	200	730	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
2,6-di-tert-Butyl-p-cresol 128-37-0			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
2,6-di-tert-Butyl-p-cresol 128-37-0		10	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

Predicted No-Effect Concentration (PNEC):

Methyl acetate	Name on list	Environmental Compartment	Exposure period	Value		Remarks		
		•	•	mg/l	ppm	mg/kg	others	
Methyl acetate water)		aqua		0,12 mg/l				
Matery M								
Methyl acetate Sewage G00 mg/l		aqua (marine		0,012 mg/l				
Methyl acetate Sediment STP				600 mg/l				
Methyl acetate Sediment Sed	79-20-9	treatment plant						
Methyl acetate Marine water) Methyl acetate Air								
Marine water								
Methyl acetate Air no hazard identified Methyl acetate Soil 0,042 79-20-9 mg/kg Methyl acetate oral 20,4 mg/kg 99-20-9 aqua 0,24 mg/l Methyl acetate aqua 0,024 mg/l 141-78-6 (freshwater) aqua 141-78-6 water) mag/kg 141-78-6 water) mag/kg 141-78-6 water) mag/kg 141-78-6 mag/kg mag/kg 141-78-6 freshyl acetate no.0.115 141-78-6 mag/kg mag/kg 141-78-6 freshwater) mg/kg 141-78-6 freshwater) mg/kg 141-78-6 freshwater) mg/kg 141-78-6 freshwa								
19-20-9		(marine water)				mg/kg		
Methyl acetate Soil	Methyl acetate	Air						no hazard identified
19-20-9	79-20-9							
19-20-9	Methyl acetate	Soil				0,042		
19-20-9	79-20-9					mg/kg		
19-20-9	Methyl acetate	oral						
Ethyl acetate aqua 0,24 mg/l						, , ,		
14.1-78-6		agua		0,24 mg/l	Ì			
Ethyl acetate aqua (marine vater)		(freshwater)		,				
141-78-6 water)				0.024 mg/l				
Ethyl acetate				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
141-78-6				1.65 mg/l				
Pelases Pela				1,05 mg/1				
Ethyl acetate	141-76-0	`						
141-78-6 treatment plant (STP)	Ethyl agatata			650 mg/l				
CSTP				030 Hig/1				
Ethyl acetate (freshwater) (fre	141-78-0							
141-78-6	Ethyl agetate					1 15 ma/lsa		
Ethyl acetate sediment (marine water) mg/kg						1,13 mg/kg		
141-78-6						0.115		
Air								
141-78-6		` ` `				IIIg/Kg		1 1:1 ::0: 1
Ethyl acetate Soil 0,148 mg/kg 141-78-6 200 mg/kg 141-78-6 200 mg/kg 141-78-6 200 mg/kg 141-78-6 200 mg/kg 128-37-0 (freshwater) mg/l 128-37-0 water) mg/l 2,6-Di-tert-butyl-p-cresol aqua (marine water) mg/l 2,6-Di-tert-butyl-p-cresol sewage 0,17 mg/l 128-37-0 treatment plant (STP) 2,6-Di-tert-butyl-p-cresol sediment (freshwater) mg/kg 128-37-0 (freshwater) mg/kg 2,6-Di-tert-butyl-p-cresol sediment (marine water) mg/kg 2,6-Di-tert-butyl-p-cresol sediment (marine water) 2,6-Di-tert-butyl-p-cresol Soil 0,04769 128-37-0 mg/kg 2,6-Di-tert-butyl-p-cresol oral 8,33 mg/kg 128-37-0 aqua (intermittent releases) mg/l		Air						no nazard identified
141-78-6 mg/kg 200 mg/kg						0.1.10		
Ethyl acetate 0ral 200 mg/kg		Soil				- /		
141-78-6								
2,6-Di-tert-butyl-p-cresol aqua (freshwater) 0,000199 mg/l 2,6-Di-tert-butyl-p-cresol aqua (marine water) 0,00002 mg/l 128-37-0 water) mg/l 2,6-Di-tert-butyl-p-cresol sewage treatment plant (STP) 0,17 mg/l 2,6-Di-tert-butyl-p-cresol sediment (freshwater) 0,0996 mg/kg 2,6-Di-tert-butyl-p-cresol sediment (marine water) 0,00996 mg/kg 128-37-0 sediment (marine water) 0,04769 mg/kg 2,6-Di-tert-butyl-p-cresol Soil 0,04769 mg/kg 2,6-Di-tert-butyl-p-cresol oral 8,33 mg/kg 2,6-Di-tert-butyl-p-cresol aqua (intermittent releases) mg/l		oral				200 mg/kg		
128-37-0								
2,6-Di-tert-butyl-p-cresol aqua (marine water) mg/l								
128-37-0 water) mg/l		` '						
2,6-Di-tert-butyl-p-cresol sewage treatment plant (STP)								
128-37-0 treatment plant (STP)		water)						
(STP) 0,0996 2,6-Di-tert-butyl-p-cresol sediment 0,0996 128-37-0 (freshwater) mg/kg 2,6-Di-tert-butyl-p-cresol sediment 0,00996 128-37-0 mg/kg mg/kg 2,6-Di-tert-butyl-p-cresol Soil 0,04769 128-37-0 mg/kg mg/kg 2,6-Di-tert-butyl-p-cresol oral 8,33 mg/kg 128-37-0 qua 0,00199 128-37-0 (intermittent releases) mg/l	2,6-Di-tert-butyl-p-cresol	sewage		0,17 mg/l				
2,6-Di-tert-butyl-p-cresol sediment (freshwater) 0,0996 mg/kg 2,6-Di-tert-butyl-p-cresol sediment (marine water) 0,00996 mg/kg 2,6-Di-tert-butyl-p-cresol Soil 0,04769 mg/kg 128-37-0 mg/kg 2,6-Di-tert-butyl-p-cresol oral 8,33 mg/kg 128-37-0 aqua (intermittent releases) 0,00199 mg/l	128-37-0	treatment plant						
128-37-0		(STP)						
128-37-0	2,6-Di-tert-butyl-p-cresol					0,0996		
2,6-Di-tert-butyl-p-cresol sediment						mg/kg		
128-37-0 (marine water) mg/kg		` '			Ì			
2,6-Di-tert-butyl-p-cresol Soil 0,04769 mg/kg 2,6-Di-tert-butyl-p-cresol oral 8,33 mg/kg 2,6-Di-tert-butyl-p-cresol aqua 0,00199 2,6-Di-tert-butyl-p-cresol intermittent mg/l 2,6-Di-tert-butyl-p-cresol aqua 0,00199 2,6-Di-tert-butyl-p-cresol intermittent mg/l								
128-37-0 mg/kg		` ` `						
2,6-Di-tert-butyl-p-cresol oral 8,33 mg/kg 128-37-0 aqua (intermittent releases) 0,00199 mg/l		50.11						
128-37-0 aqua 0,00199 128-37-0 (intermittent releases) mg/l		oral						
2,6-Di-tert-butyl-p-cresol aqua (0,00199 mg/l mg/l mg/l		orar				o,55 mg/kg		
128-37-0 (intermittent mg/l releases)		nome:		0.00100				
releases)								
	120-37-0			111g/1				
2,0-D1-ten-buty1-p-cresor Air	0.6 Di tout butul u1			+				no horond : 1::::::: 1
128-37-0		Air						no nazard identified

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Methyl acetate 79-20-9	Workers	inhalation	Long term exposure - systemic effects		610 mg/m3	no hazard identified
Methyl acetate 79-20-9	Workers	inhalation	Long term exposure - local effects		305 mg/m3	no hazard identified
Methyl acetate 79-20-9	Workers	dermal	Long term exposure - systemic effects		88 mg/kg	no hazard identified
Methyl acetate 79-20-9	General population	inhalation	Long term exposure - systemic effects		131 mg/m3	no hazard identified
Methyl acetate 79-20-9	General population	inhalation	Long term exposure - local effects		152 mg/m3	no hazard identified
Methyl acetate 79-20-9	General population	dermal	Long term exposure - systemic effects		44 mg/kg	no hazard identified
Methyl acetate 79-20-9	General population	oral	Long term exposure - systemic effects		44 mg/kg	no hazard identified
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	Workers	dermal	Long term exposure - systemic effects		13964 mg/kg	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	Workers	inhalation	Long term exposure - systemic effects		5306 mg/m3	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	General population	dermal	Long term exposure - systemic effects		1377 mg/kg	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	General population	inhalation	Long term exposure - systemic effects		1131 mg/m3	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	General population	oral	Long term exposure - systemic effects		1301 mg/kg	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	Workers	dermal	Long term exposure - systemic effects		773 mg/kg	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	Workers	inhalation	Long term exposure - systemic effects		2035 mg/m3	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	General population	dermal	Long term exposure - systemic effects		699 mg/kg	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	General population	inhalation	Long term exposure - systemic effects		608 mg/m3	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	General population	oral	Long term exposure - systemic effects		699 mg/kg	
Ethyl acetate 141-78-6	Workers	inhalation	Acute/short term exposure - systemic effects		1468 mg/m3	no hazard identified
Ethyl acetate 141-78-6	Workers	inhalation	Acute/short term exposure - local effects		1468 mg/m3	no hazard identified
Ethyl acetate 141-78-6	Workers	dermal	Long term exposure - systemic effects		63 mg/kg	no hazard identified
Ethyl acetate 141-78-6	Workers	inhalation	Long term exposure - systemic effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	Workers	inhalation	Long term exposure - local effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	Inhalation	Acute/short term exposure - systemic effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	inhalation	Acute/short term exposure - local		734 mg/m3	no hazard identified

	1		effects		
Ethyl acetate	General	dermal	Long term	37 mg/kg	no hazard identified
141-78-6	population		exposure -		
			systemic effects	2.7 / 2	
Ethyl acetate	General	inhalation	Long term	367 mg/m3	no hazard identified
141-78-6	population		exposure - systemic effects		
Ethyl acetate	General	oral	Long term	4,5 mg/kg	no hazard identified
141-78-6	population	orar	exposure -	+,5 mg/kg	no nazara racitatica
	Formula		systemic effects		
Ethyl acetate	General	inhalation	Long term	367 mg/m3	no hazard identified
141-78-6	population		exposure - local		
			effects		
Hydrocarbons, C7, n-alkanes, isoalkanes,	Workers	dermal	Long term	300 mg/kg	
cyclics 64742-49-0			exposure -		
Hydrocarbons, C7, n-alkanes, isoalkanes,	Workers	inhalation	systemic effects Long term	2085 mg/m3	
cyclics	Workers	Illitatation	exposure -	2083 Hig/III3	
64742-49-0			systemic effects		
Hydrocarbons, C7, n-alkanes, isoalkanes,	General	dermal	Long term	149 mg/kg	
cyclics	population		exposure -		
64742-49-0	1		systemic effects		
Hydrocarbons, C7, n-alkanes, isoalkanes,	General	oral	Long term	149 mg/kg	
cyclics	population		exposure -		
64742-49-0			systemic effects		
Hydrocarbons, C7, n-alkanes, isoalkanes,	General	inhalation	Long term	447 mg/m3	
cyclics 64742-49-0	population		exposure - systemic effects		
Naphtha (petroleum), hydrotreated light, <	Workers	Inhalation	Long term	5306 mg/m3	
0.1% benzene	WOIKEIS	illiaration	exposure -	3300 mg/m3	
64742-49-0			systemic effects		
Naphtha (petroleum), hydrotreated light, <	Workers	dermal	Long term	13964 mg/kg	
0,1% benzene			exposure -		
64742-49-0			systemic effects		
Naphtha (petroleum), hydrotreated light, <	General	Inhalation	Long term	1131 mg/m3	
0,1% benzene	population		exposure -		
64742-49-0	C 1	1 1	systemic effects	1277 /	
Naphtha (petroleum), hydrotreated light, < 0,1% benzene	General population	dermal	Long term exposure -	1377 mg/kg	
64742-49-0	population		systemic effects		
Naphtha (petroleum), hydrotreated light, <	General	oral	Long term	1301 mg/kg	
0,1% benzene	population	orur	exposure -	1301 mg/kg	
64742-49-0	Formula		systemic effects		
2,6-Di-tert-butyl-p-cresol	Workers	inhalation	Long term	3,5 mg/m3	no hazard identified
128-37-0			exposure -		
			systemic effects		
2,6-Di-tert-butyl-p-cresol	Workers	dermal	Long term	0,5 mg/kg	no hazard identified
128-37-0			exposure -		
2,6-Di-tert-butyl-p-cresol	General	inhalation	systemic effects Long term	0,86 mg/m3	no hazard identified
2,6-D1-tert-buty1-p-cresol 128-37-0	population	пшаши	exposure -	0,00 1119/1113	no nazaru identined
120-37-0	рориганоп		systemic effects		
2,6-Di-tert-butyl-p-cresol	General	dermal	Long term	0,25 mg/kg	no hazard identified
128-37-0	population		exposure -	-,	
			systemic effects		
2,6-Di-tert-butyl-p-cresol	General	oral	Long term	0,25 mg/kg	no hazard identified
128-37-0	population		exposure -		
			systemic effects		

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

In case of aerosol forming ensure sufficient suction and ventilation.

Respiratory protection:

In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter (EN 14387).

This recommendation should be matched to local conditions.

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): Isobutylene-isoprene rubber (IIR; >= 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; >= 0.7 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:

Goggles which can be tightly sealed.

Protective eye equipment should conform to EN166.

Skin protection:

Wear protective equipment.

Protective clothing that covers arms and legs.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

Use only personal protection that's CE-labelled according to Directive 89/686/EEC (Europe) or to Regulation No. 819 of 19 August 1994 (Norway), or equivalent.

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 aerosol Colour colourless Odor of solvent Melting point Not available. Solidification temperature $< -25 \, ^{\circ}\text{C} \, (< -13 \, ^{\circ}\text{F})$ Initial boiling point 52 °C (125.6 °F) Flammability Flammable liquid

Explosive limits

lower 1,29 %(V);

Upper explosion limit not applicable for safe processing

practices.

Flash point < 0 °C (< 32 °F); no method

Auto-ignition temperature $> 200 \, ^{\circ}\text{C} \, (> 392 \, ^{\circ}\text{F})$

Decomposition temperature Not applicable, Substance/mixture is not self-reactive, no

organic peroxide and does not decompose under foreseen

conditions of use

pH Not available., Product is non-soluble (in water).

Viscosity (kinematic) 290 mm2/s

(40 °C (104 °F);)

Solubility (qualitative) Insoluble

(20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water Currently under determination

Vapour pressure 300 hPa;no method

(20 °C (68 °F))

Vapour pressure 950 hPa

(50 °C (122 °F))

Density 0,88 g/cm3 no method

(20 °C (68 °F))

Relative vapour density: > 1

(20 °C)

Particle characteristics Not applicable

Product is a liquid

9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

Oxidizers.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Heat, flames, sparks and other sources of ignition.

Temperatures over appr. 50 °C

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

No decomposition if used according to specifications.

SECTION 11: Toxicological information

General toxicological information:

An allergic reaction cannot be excluded after repeated skin contact.

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

Acute oral toxicity:

Hazardous substances CAS-No.	Value type	Value	Species	Method
Methyl acetate 79-20-9	LD50	6.482 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	LD50	> 16.750 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Ethyl acetate 141-78-6	LD50	6.100 mg/kg	rat	not specified
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics 64742-49-0	LD50	> 5.840 mg/kg	rat	not specified
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	LD50	> 16.750 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Butyl hydroxytoluene 128-37-0	LD50	> 6.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute dermal toxicity:

Hazardous substances CAS-No.	Value type	Value	Species	Method
Methyl acetate 79-20-9	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	LD50	> 3.350 mg/kg	rabbit	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
Ethyl acetate 141-78-6	LD50	> 20.000 mg/kg	rabbit	Draize Test
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics 64742-49-0	LD50	> 2.800 mg/kg	rat	other guideline:
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	LD50	> 3.350 mg/kg	rabbit	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)
Butyl hydroxytoluene 128-37-0	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)

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		
Methyl acetate 79-20-9	LC50	> 49,2 mg/l	vapour	4 h	rabbit	not specified
Isobutane 75-28-5	LC50	260200 ppm	gas	4 h	mouse	not specified
Propane 74-98-6	LC50	> 800000 ppm	gas	15 min	rat	not specified
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	LC50	259,354 mg/l	vapour	4 h	rat	equivalent or similar to OECD Guideline 403 (Acute Inhalation Toxicity)
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	LC50	> 25,2 mg/l	vapour	4 h	rat	not specified
Ethyl acetate 141-78-6	LC0	> 22,5 mg/l	dust/mist	6 h	rat	other guideline:
Ethyl acetate 141-78-6	LC50	> 22,5 mg/l	dust/mist	6 h	rat	other guideline:
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics 64742-49-0	LC50	> 23,3 mg/l	vapour	4 h	rat	equivalent or similar to OECD Guideline 403 (Acute Inhalation Toxicity)
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics 64742-49-0	Acute toxicity estimate (ATE)	23,31 mg/l				Expert judgement
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	LC50	259,354 mg/l	vapour	4 h	rat	equivalent or similar to OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation:

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
Methyl acetate	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
79-20-9				
Hydrocarbons, C6-C7,	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
isoalkanes, cyclics, <5%				
n-hexane				
92128-66-0				
Ethyl acetate	slightly	24 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute
141-78-6	irritating			Dermal Irritation / Corrosion)
Hydrocarbons, C7, n-	irritating	4 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute
alkanes, isoalkanes,				Dermal Irritation / Corrosion)
cyclics				
64742-49-0				
Butyl hydroxytoluene	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
128-37-0				

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
Methyl acetate 79-20-9	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	not irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Ethyl acetate 141-78-6	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics 64742-49-0	not irritating		rabbit	FDA Guideline
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	not irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Butyl hydroxytoluene 128-37-0	slightly irritating		rabbit	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
Methyl acetate 79-20-9	not sensitising	Skin sensitisation	human	Weight of evidence
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 92128-66-0	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Ethyl acetate 141-78-6	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Butyl hydroxytoluene 128-37-0	not sensitising	Draize Test	guinea pig	Draize Test

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
Methyl acetate 79-20-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Isobutane 75-28-5	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Isobutane 75-28-5	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Propane 74-98-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Propane 74-98-6	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Ethyl acetate 141-78-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Ethyl acetate 141-78-6	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Butyl hydroxytoluene 128-37-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
Butyl hydroxytoluene 128-37-0	negative	in vitro mammalian chromosome aberration test	with and without		not specified
Butyl hydroxytoluene 128-37-0	negative	mammalian cell gene mutation assay	with		not specified
Methyl acetate 79-20-9	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Isobutane 75-28-5	negative	oral: feed		Drosophila melanogaster	not specified
Isobutane 75-28-5	negative	inhalation: gas		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Propane 74-98-6	negative			Drosophila melanogaster	not specified
Propane 74-98-6	negative	inhalation: gas		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Ethyl acetate 141-78-6	negative	oral: gavage		hamster, Chinese	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	negative	inhalation: vapour		rat	equivalent or similar to OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)
Butyl hydroxytoluene 128-37-0	negative	oral: feed		rat	not specified

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
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	not carcinogenic	inhalation: vapour	2 years 6 h/d, 5d/week	rat	male/female	equivalent or similar OECD Guideline 451 (Carcinogenicity Studies)
Butyl hydroxytoluene 128-37-0		oral: feed	2 y daily	rat	male	

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
Methyl acetate 79-20-9	NOAEL P 1,3 mg/l NOAEL F1 0,13 mg/l NOAEL F2 0,13 mg/l	Two generation study	inhalation	rat	equivalent or similar to OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
Isobutane 75-28-5	NOAEL P 21,4 mg/l NOAEL F1 21,4 mg/l	screening	inhalation: gas	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Propane 74-98-6	NOAEL P 21,6 mg/l NOAEL F1 21,6 mg/l	screening	inhalation: gas	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Ethyl acetate 141-78-6	NOAEL P 1500 ppm	other:	inhalation	rat	other guideline:
Butyl hydroxytoluene 128-37-0	NOAEL P 500 mg/kg	Two generation study	oral: feed	rat	not specified

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
Methyl acetate 79-20-9	NOAEL 350 ppm	inhalation: aerosol	28 d 6 h/d, 5 d/w	rat	OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)
Isobutane 75-28-5	NOAEL 9000 ppm	inhalation: gas	28 d 6 h/d, 7 d/w	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Propane 74-98-6		inhalation: gas	28 d 6 h/d, 7 d/w	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Ethyl acetate 141-78-6	NOAEL 900 mg/kg	oral: gavage	90 d daily	rat	EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	NOAEL 10,504 mg/l	inhalation: vapour	13 weeks 6 h/d, 5 d/week	rat	equivalent or similar to OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
Butyl hydroxytoluene 128-37-0	NOAEL 25 mg/kg	oral: feed	daily	rat	not specified

Aspiration hazard:

The mixture is classified based on Viscosity data.

Hazardous substances	Viscosity (kinematic)	Temperature	Method	Remarks
CAS-No.	Value			
Hydrocarbons, C6-C7, n-	0,61 mm2/s	25 °C	not specified	
alkanes, isoalkanes,				
cyclics, <5% n-hexane				
Hydrocarbons, C7, n-	0,5 mm2/s	20 °C	not specified	
alkanes, isoalkanes,				
cyclics				
64742-49-0				

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
Methyl acetate 79-20-9	LC50	250 - 350 mg/l	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-	LL50	12 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
hexane 92128-66-0					
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane	LL50	11,4 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Ethyl acetate 141-78-6	LC50	220 mg/l	96 h	Pimephales promelas	other guideline:
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	LL50	> 13,4 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	LC50	> 1 - 10 mg/l			OECD Guideline 203 (Fish, Acute Toxicity Test)
Butyl hydroxytoluene 128-37-0	LC50	Toxicity > Water solubility	96 h	Brachydanio rerio (new name: Danio rerio)	EU Method C.1 (Acute Toxicity for Fish)
Butyl hydroxytoluene 128-37-0	NOEC	0,053 mg/l	30 d	Oryzias latipes	OECD Guideline 210 (fish early lite stage 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
Methyl acetate 79-20-9	EC50	1.026,7 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n- hexane 92128-66-0	EL50	3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane	EL50	3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Ethyl acetate 141-78-6	EC50	164 mg/l	48 h	Daphnia cucullata	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	EC50	3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	EC50	3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Butyl hydroxytoluene 128-37-0	EC50	0,48 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydrocarbons, C6-C7, n-	NOEC	0,17 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
alkanes, isoalkanes, cyclics,					magna, Reproduction Test)
<5% n-hexane					

Ethyl acetate 141-78-6	NOEC	2,4 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	NOEC	0,17 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Butyl hydroxytoluene 128-37-0	NOEC	0,069 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

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. Methyl acetate 79-20-9	type EC50	> 120 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methyl acetate 79-20-9	NOEC	120 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n- hexane 92128-66-0	EL50	55 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n- hexane 92128-66-0	NOEL	30 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	EL50	> 30 - 100 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane	NOELR	3 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethyl acetate 141-78-6	EC50	> 2.000 mg/l	96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethyl acetate 141-78-6	NOEC	2.000 mg/l	96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	EL50	29 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	NOELR	6,3 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	EC50	> 1 - 10 mg/l			OECD Guideline 201 (Alga, Growth Inhibition Test)
Butyl hydroxytoluene 128-37-0	EC50	Toxicity > Water solubility	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Butyl hydroxytoluene 128-37-0	EC10	0,4 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	EU Method C.3 (Algal Inhibition test)

Toxicity to microorganisms

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No. Methyl acetate 79-20-9	EC10	1.830 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm-
Ethyl acetate 141-78-6	EC10	2.900 mg/l	18 h	Pseudomonas putida	Test) DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
Butyl hydroxytoluene 128-37-0	EC50	Toxicity > Water solubility	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Methyl acetate 79-20-9	readily biodegradable	aerobic	70 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Methyl acetate 79-20-9	inherently biodegradable	aerobic	> 95 %	6 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Isobutane 75-28-5	readily biodegradable	aerobic	71,43 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Propane 74-98-6	readily biodegradable	aerobic	> 60 %	28 d	OECD 301 A - F
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n- hexane 92128-66-0	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Hydrocarbons, C6-C7, n- alkanes, isoalkanes, cyclics, <5% n-hexane	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Ethyl acetate 141-78-6	readily biodegradable	aerobic	100 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Butyl hydroxytoluene 128-37-0	not readily biodegradable.	aerobic	4,5 %	28 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
Butyl hydroxytoluene 128-37-0	not inherently biodegradable	aerobic	5,2 - 5,6 %	35 d	OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))

12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Ethyl acetate 141-78-6	30	3 d	22,5 °C	Leuciscus idus melanotus	other guideline:
Butyl hydroxytoluene 128-37-0	330 - 1.800	56 d		Cyprinus carpio	OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)

12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
Methyl acetate 79-20-9	0,18		other guideline:
Isobutane 75-28-5	2,88	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n- hexane 92128-66-0	3,6	20 °C	other guideline:
Ethyl acetate 141-78-6	0,68	25 °C	EPA OPPTS 830.7560 (Partition Coefficient, n-octanol / H2O, Generator Column Method)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	4 - 5,7		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Butyl hydroxytoluene 128-37-0	5,1		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Methyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-20-9	Bioaccumulative (vPvB) criteria.
Isobutane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
75-28-5	Bioaccumulative (vPvB) criteria.
Propane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
74-98-6	Bioaccumulative (vPvB) criteria.
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5%	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
n-hexane	Bioaccumulative (vPvB) criteria.
92128-66-0	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes,	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
cyclics, <5% n-hexane	Bioaccumulative (vPvB) criteria.
Ethyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
141-78-6	Bioaccumulative (vPvB) criteria.
Hydrocarbons, C7, n-alkanes, isoalkanes,	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
cyclics	Bioaccumulative (vPvB) criteria.
64742-49-0	
Hydrocarbons, C6, isoalkanes, <5% n-hexane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
64742-49-0	Bioaccumulative (vPvB) criteria.
Butyl hydroxytoluene	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
128-37-0	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:

In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

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. 080409

SECTION 14: Transport information

14.1. UN number or ID number

ADR	1950
RID	1950
ADN	1950
IMDG	1950
IATA	1950

14.2. UN proper shipping name

ADR	AEROSOLS
RID	AEROSOLS
ADN	AEROSOLS
IMDG	AEROSOLS
IATA	Aerosols, flammable

14.3. Transport hazard class(es)

ADR	2.1
RID	2.1
ADN	2.1
IMDG	2.1
IATA	2.1

14.4. Packing group

ADR RID ADN **IMDG IATA**

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	not applicable
	Tunnelcode: (D)
RID	not applicable
ADN	not applicable
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): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021): VOC content

Not applicable Not applicable Not applicable

(2010/75/EU)

79,7 %

VOC Paints and Varnishes (EU):

Product (sub)category: This product is not a subject of the Directive 2004/42/EC

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

Storage class according to TRGS 510: 2B

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:

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic 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:

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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,

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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 ethyl acetate can be downloaded under the following link: https://mysds.henkel.com/index.html#/appSelection