

TEROSON VR 4600 AE

# 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

TEROSON VR 4600 AE

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

Intended use:

Aerosol

## 1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

Germany

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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):

Aerosol Category 1

H222 Extremely flammable aerosol.

H229 Pressurized container: May burst if heated.

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

Acute hazards to the aquatic environment Category 1

H400 Very toxic to aquatic life.

Chronic hazards to the aquatic environment Category 1

H410 Very toxic to aquatic life with long lasting effects.

## 2.2. Label elements

#### Label elements (CLP):



Contains n-butyl acetate

acetone

Hydrocarbons, C9, aromatics

Signal word:	Danger
Hazard statement:	H222 Extremely flammable aerosol.
	H229 Pressurized container: May burst if heated.
	H319 Causes serious eye irritation.
	H336 May cause drowsiness or dizziness.
	H410 Very toxic to aquatic life with long lasting effects.
Supplemental information	EUH066 Repeated exposure may cause skin dryness or cracking.
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 spray.
	P273 Avoid release to the environment.
	P280 Wear eye protection.
Precautionary statement:	P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Storage	

#### 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.

Following substances are present in a concentration  $\geq$  the concentration limit for depiction in Section 3 and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in a concentration  $\geq$  the concentration limit for depiction in Section 3 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
Zinc powder - zinc dust (stabilised) 7440-66-6 231-175-3 01-2119467174-37	25-< 50 %	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M acute = 1 M chronic = 1	
n-butyl acetate 123-86-4 204-658-1 01-2119485493-29	12,5-< 20 %	Flam. Liq. 3, H226 STOT SE 3, H336		EU OEL
Propane 74-98-6 200-827-9 01-2119486944-21	12,5-< 20 %	Flam. Gas 1A, H220 Press. Gas H280		
acetone 67-64-1 200-662-2 01-2119471330-49	10- < 12,5 %	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336		EU OEL EUEXPL2D
Butane, n- (< 0.1 % butadiene) 106-97-8 203-448-7 01-2119474691-32	10- < 12,5 %	Press. Gas H280 Flam. Gas 1A, H220		
Hydrocarbons, C9, aromatics 64742-95-6 265-199-0 01-2119455851-35	5-< 10 %	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 2, H411		
Isobutane 75-28-5 200-857-2 01-2119485395-27	2,5-< 5 %	Flam. Gas 1A, H220 Press. Gas Liquef. Gas, H280		
Xylene - mixture of isomeres 1330-20-7 215-535-7 01-2119488216-32	2,5-< 5 %	Asp. Tox. 1, H304 Acute Tox. 4, Inhalation, H332 Acute Tox. 4, Dermal, H312 Skin Irrit. 2, H315 Flam. Liq. 3, H226 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412		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

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing.

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.

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

### 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.

# 7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Protect from direct sunlight and temperatures above 50°C. The storage regulations for aerosols apply. Storage at 15 to 20°C is recommended.

# 7.3. Specific end use(s)

Aerosol

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# **Occupational Exposure Limits**

Valid for

Germany

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
n-Butyl acetate 123-86-4	62	300	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
n-Butyl acetate 123-86-4			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
n-Butyl acetate 123-86-4 [N-BUTYL ACETATE]	150	723	Short Term Exposure Limit (STEL):	Indicative	ECTLV
n-Butyl acetate 123-86-4 [N-BUTYL ACETATE]	50	241	Time Weighted Average (TWA):	Indicative	ECTLV
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
Acetone 67-64-1 [ACETONE]	500	1.210	Time Weighted Average (TWA):	Indicative	ECTLV
Acetone 67-64-1	500	1.200	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
Acetone 67-64-1			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
Butane 106-97-8	1.000	2.400	Exposure limit(s):	4	TRGS 900
Butane 106-97-8			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	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
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS, PURE]	50	221	Time Weighted Average (TWA):	Indicative	ECTLV
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS, PURE]	100	442	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Xylene 1330-20-7			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Xylene 1330-20-7			Skin designation:	Can be absorbed through the skin.	TRGS 900
Xylene 1330-20-7	50	220	Exposure limit(s):	2	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	
Zinc	aqua		20,6 μg/l	1			
7440-66-6	(freshwater)		1 , 0				
Zinc	aqua (marine		6,1 µg/l				
7440-66-6	water)						
Zinc	sewage		100 μg/l				
7440-66-6	treatment plant						
	(STP)						
Zinc	sediment				118 mg/kg		
7440-66-6	(freshwater)						
Zinc	sediment				56,5 mg/kg		
7440-66-6	(marine water)						
Zinc	Soil				35,6 mg/kg		
7440-66-6							
n-Butyl acetate	aqua		0,18 mg/l				
123-86-4	(freshwater)						
n-Butyl acetate	aqua (marine		0,018 mg/l				
123-86-4	water)						
n-Butyl acetate	aqua		0,36 mg/l				
123-86-4	(intermittent						
	releases)						
n-Butyl acetate	sewage		35,6 mg/l				
123-86-4	treatment plant						
	(STP)						
n-Butyl acetate	sediment				0,981		
123-86-4	(freshwater)				mg/kg		
n-Butyl acetate	sediment				0,0981		
123-86-4	(marine water)				mg/kg		
n-Butyl acetate	Soil				0,0903		
123-86-4					mg/kg		
n-Butyl acetate	Air						no hazard identified
123-86-4							
n-Butyl acetate	Predator						no potential for
123-86-4							bioaccumulation
acetone	aqua		21 mg/l				
67-64-1	(intermittent						
	releases)						
acetone	sewage		100 mg/l				
67-64-1	treatment plant						
	(STP)						
acetone	sediment				30,4 mg/kg		
67-64-1	(freshwater)						
acetone	sediment				3,04 mg/kg		
67-64-1	(marine water)						
acetone	Soil				29,5 mg/kg		
67-64-1							
acetone	aqua		10,6 mg/l				
67-64-1	(freshwater)						
acetone	aqua (marine		1,06 mg/l				
67-64-1	water)						
Xylene - mixture of isomeres	aqua		0,327 mg/l				
1330-20-7	(freshwater)						
Xylene - mixture of isomeres	sediment				12,46		
1330-20-7	(freshwater)				mg/kg		
Xylene - mixture of isomeres	Soil				2,31 mg/kg		
1330-20-7							
Xylene - mixture of isomeres	aqua (marine		0,327 mg/l				
1330-20-7	water)		1				
Xylene - mixture of isomeres	aqua		0,327 mg/l			1	
1330-20-7	(intermittent					1	
	releases)						
Xylene - mixture of isomeres	sewage		6,58 mg/l			1	
1330-20-7	treatment plant						
	(STP)						
Xylene - mixture of isomeres	sediment				12,46	1	
1330-20-7	(marine water)				mg/kg		

# **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Zinc 7440-66-6	Workers	Inhalation	Long term exposure - systemic effects		5 mg/m3	
Zinc 7440-66-6	Workers	dermal	Long term exposure - systemic effects		83 mg/kg	
Zinc 7440-66-6	General population	Inhalation	Long term exposure - systemic effects		2,5 mg/m3	
Zinc 7440-66-6	General population	dermal	Long term exposure - systemic effects		83 mg/kg	
Zinc 7440-66-6	General population	oral	Long term exposure - systemic effects		0,83 mg/kg	
n-Butyl acetate 123-86-4	Workers	inhalation	Long term exposure - systemic effects		300 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	Workers	inhalation	Acute/short term exposure - systemic effects		600 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	Workers	inhalation	Long term exposure - local effects		300 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	Workers	inhalation	Acute/short term exposure - local effects		600 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	Workers	dermal	Long term exposure - systemic effects		11 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	Workers	dermal	Acute/short term exposure - systemic effects		11 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	inhalation	Long term exposure - systemic effects		35,7 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	General population	inhalation	Acute/short term exposure - systemic effects		300 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	General population	inhalation	Acute/short term exposure - local effects		300 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	General population	dermal	Long term exposure - systemic effects		6 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	dermal	Acute/short term exposure - systemic effects		6 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	oral	Long term exposure - systemic effects		2 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	oral	Acute/short term exposure - systemic effects		2 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	inhalation	Long term exposure - local effects		35,7 mg/m3	no hazard identified
acetone 67-64-1	Workers	Inhalation	Acute/short term exposure - local effects		2420 mg/m3	
acetone 67-64-1	Workers	dermal	Long term exposure - systemic effects		186 mg/kg	
acetone 67-64-1	Workers	Inhalation	Long term exposure - systemic effects		1210 mg/m3	
acetone 67-64-1	General population	dermal	Long term exposure - systemic effects		62 mg/kg	
acetone 67-64-1	General population	Inhalation	Long term exposure -		200 mg/m3	

I			systemic effects		
acetone 67-64-1	General population	oral	Long term exposure - systemic effects	62 mg/kg	
Hydrocarbons, C9, aromatics 64742-95-6	Workers	inhalation	Long term exposure - systemic effects	151 mg/m3	
Hydrocarbons, C9, aromatics 64742-95-6	Workers	dermal	Long term exposure - systemic effects	12,5 mg/kg	
Hydrocarbons, C9, aromatics 64742-95-6	General population	inhalation	Long term exposure - systemic effects	32 mg/m3	
Hydrocarbons, C9, aromatics 64742-95-6	General population	dermal	Long term exposure - systemic effects	7,5 mg/kg	
Hydrocarbons, C9, aromatics 64742-95-6	General population	oral	Long term exposure - systemic effects	7,5 mg/kg	
Xylene - mixture of isomeres 1330-20-7	Workers	inhalation	Long term exposure - systemic effects	221 mg/m3	
Xylene - mixture of isomeres 1330-20-7	Workers	inhalation	Acute/short term exposure - systemic effects	442 mg/m3	
Xylene - mixture of isomeres 1330-20-7	Workers	inhalation	Long term exposure - local effects	221 mg/m3	
Xylene - mixture of isomeres 1330-20-7	Workers	inhalation	Acute/short term exposure - local effects	442 mg/m3	
Xylene - mixture of isomeres 1330-20-7	Workers	dermal	Long term exposure - systemic effects	212 mg/kg	
Xylene - mixture of isomeres 1330-20-7	General population	inhalation	Long term exposure - systemic effects	65,3 mg/m3	
Xylene - mixture of isomeres 1330-20-7	General population	inhalation	Acute/short term exposure - systemic effects	260 mg/m3	
Xylene - mixture of isomeres 1330-20-7	General population	inhalation	Long term exposure - local effects	65,3 mg/m3	
Xylene - mixture of isomeres 1330-20-7	General population	inhalation	Acute/short term exposure - local effects	260 mg/m3	
Xylene - mixture of isomeres 1330-20-7	General population	dermal	Long term exposure - systemic effects	125 mg/kg	
Xylene - mixture of isomeres 1330-20-7	General population	oral	Long term exposure - systemic effects	12,5 mg/kg	

# **Biological Exposure Indices:**

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time		Basis of biol. exposure index	 Additional Information
Acetone	acetone	Urine	Sampling time: End of	80 mg/l	DE BGW	
67-64-1			shift.			
Xylene	Methylhippur	Urine	Sampling time: End of	2.000 mg/l	DE BGW	
1330-20-7	ic (toluric)		shift.			
	acid (all					
	isomers)					

# 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 grey
Odor characte

Odor characteristic
Melting point Not available.
Initial boiling point Not available.

Flammability Currently under determination

**Explosive limits** 

lower 1,20 %(V); No data available.
upper 13,0 %(V); No data available.
Upper/lower explosion limit

Flash point  $-20,00 \,^{\circ}\text{C} \,(-4 \,^{\circ}\text{F})$ 

Auto-ignition temperature Currently under determination

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

organic peroxide and does not decompose under foreseen

conditions of use

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

Viscosity (kinematic) Currently under determination Solubility (qualitative) Not miscible or difficult to mix

(20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water Currently under determination

Vapour pressure 8300,0 hPa

(20 °C (68 °F))

Density 1,03 g/cm3 Supplier method

(20 °C (68 °F))

Relative vapour density:

Particle characteristics

Not available.

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

Temperatures over appr. 50  $^{\circ}\text{C}$ 

Heat, flames, sparks and other sources of ignition.

## 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.

# 11.1 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
Zinc powder - zinc dust (stabilised) 7440-66-6	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
n-butyl acetate 123-86-4	LD50	10.760 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
acetone 67-64-1	LD50	5.800 mg/kg	rat	not specified
Hydrocarbons, C9, aromatics 64742-95-6	LD50	3.492 mg/kg	rat	not specified
Xylene - mixture of isomeres 1330-20-7	LD50	3.523 mg/kg	rat	EU Method B.1 (Acute Toxicity (Oral))

# 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
n-butyl acetate 123-86-4	LD50	> 14.112 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
acetone 67-64-1	LD50	> 15.688 mg/kg	rabbit	Draize Test
Hydrocarbons, C9, aromatics 64742-95-6	LD50	> 3.160 mg/kg	rabbit	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)
Xylene - mixture of isomeres 1330-20-7	LD50	1.700 mg/kg	rabbit	not specified

# 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	•	Species	Method
CAS-No.	type			time		
Zinc powder - zinc dust	LC50	> 5,41  mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
(stabilised)						Inhalation Toxicity)
7440-66-6						
n-butyl acetate	LC50	> 23,4 mg/l	mist	4 h	rat	OECD Guideline 403 (Acute
123-86-4		, ,				Inhalation Toxicity)
Propane	LC50	> 800000 ppm	gas	15 min	rat	not specified
74-98-6		11				
acetone	LC50	76 mg/l	vapour	4 h	rat	not specified
67-64-1			1			•
Butane, n- (< 0.1 %	LC50	274200 ppm	gas	4 h	rat	not specified
butadiene)						•
106-97-8						
Hydrocarbons, C9,	LC50	> 6,193 mg/l	vapour	4 h	rat	equivalent or similar to OECD
aromatics			1			Guideline 403 (Acute
64742-95-6						Inhalation Toxicity)
Isobutane	LC50	260200 ppm	gas	4 h	mouse	not specified
75-28-5		11				1
Xylene - mixture of	LC50	11 mg/l	vapour	4 h	rat	not specified
isomeres			1			<b>,</b>
1330-20-7						

# 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		
Zinc powder - zinc dust (stabilised) 7440-66-6	not irritating	24 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
n-butyl acetate 123-86-4	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
acetone 67-64-1	not irritating		guinea pig	not specified
Hydrocarbons, C9, aromatics 64742-95-6	mildly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Xylene - mixture of isomeres 1330-20-7	moderately irritating		rabbit	not specified

# Serious eye damage/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		
Zinc powder - zinc dust	slightly		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
(stabilised)	irritating			
7440-66-6				
n-butyl acetate	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
123-86-4				
acetone	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
67-64-1				
Hydrocarbons, C9,	not irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye
aromatics				Irritation / Corrosion)
64742-95-6				, , , , , , , , , , , , , , , , , , ,
Xylene - mixture of	slightly		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
isomeres	irritating			
1330-20-7				

# 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
Zinc powder - zinc dust (stabilised) 7440-66-6	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
n-butyl acetate 123-86-4	not sensitising	Guinea pig maximisation test	guinea pig	not specified
acetone 67-64-1	not sensitising	Guinea pig maximisation test	guinea pig	not specified
Hydrocarbons, C9, aromatics 64742-95-6	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Xylene - mixture of isomeres 1330-20-7	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

# 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
Zinc powder - zinc dust (stabilised) 7440-66-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Zinc powder - zinc dust (stabilised) 7440-66-6	negative	mammalian cell gene mutation assay	without		not specified
n-butyl acetate 123-86-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
n-butyl acetate 123-86-4	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation 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)
acetone 67-64-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
acetone 67-64-1	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
acetone 67-64-1	negative	mammalian cell gene mutation assay	without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Butane, n- (< 0.1 % butadiene) 106-97-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Butane, n- (< 0.1 % butadiene) 106-97-8	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Hydrocarbons, C9, aromatics 64742-95-6	negative	sister chromatid exchange assay in mammalian cells	with and without		equivalent or similar to OECD Guideline 479 (Genetic Toxicology: In Vitro Sister Chromatid Exchange Assay in Mammalian Cells)
Hydrocarbons, C9, aromatics 64742-95-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hydrocarbons, C9, aromatics 64742-95-6	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Hydrocarbons, C9, aromatics 64742-95-6	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
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)
Xylene - mixture of isomeres 1330-20-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Xylene - mixture of isomeres 1330-20-7	negative	in vitro mammalian chromosome aberration test	with and without		EU Method B.10 (Mutagenicity)
Xylene - mixture of isomeres 1330-20-7	negative	sister chromatid exchange assay in mammalian cells	with and without		EU Method B.19 (Sister Chromatid Exchange Assay In Vitro)
Zinc powder - zinc dust (stabilised) 7440-66-6	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
n-butyl acetate	negative	oral: gavage		mouse	OECD Guideline 474

123-86-4				(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)
acetone 67-64-1	negative	oral: drinking water	mouse	not specified
Butane, n- (< 0.1 % butadiene) 106-97-8	negative	inhalation: gas	rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Hydrocarbons, C9, aromatics 64742-95-6	negative	inhalation: vapour	rat	equivalent or similar to OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration 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)
Xylene - mixture of isomeres 1330-20-7	negative	intraperitoneal	rat	OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal 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
Zinc powder - zinc dust (stabilised) 7440-66-6	not carcinogenic	oral: drinking water	1 y daily	mouse	male/female	not specified
acetone 67-64-1	not carcinogenic	dermal	424 d 3 times per week	mouse	female	not specified
Xylene - mixture of isomeres 1330-20-7	not carcinogenic	oral: gavage	103 w 5 d/w	rat	male/female	EU Method B.32 (Carcinogenicity Test)

# Reproductive toxicity:

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

Hazardous substances	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
Zinc powder - zinc dust	NOAEL F1 7,2 mg/kg	Two	oral: gavage	rat	OECD Guideline 416 (Two-
(stabilised)		generation			Generation Reproduction
7440-66-6		study			Toxicity Study)
Propane	NOAEL P 21,6 mg/l	screening	inhalation:	rat	OECD Guideline 422
74-98-6	_		gas		(Combined Repeated Dose
	NOAEL F1 21,6 mg/l				Toxicity Study with the
	_				Reproduction /
					Developmental Toxicity
					Screening Test)
Butane, n- (< 0.1 %	NOAEL P 21,4 mg/l	screening	inhalation:	rat	OECD Guideline 422
butadiene)	_		gas		(Combined Repeated Dose
106-97-8	NOAEL F1 21,4 mg/l				Toxicity Study with the
					Reproduction /
					Developmental Toxicity
					Screening Test)
Isobutane	NOAEL P 21,4 mg/l	screening	inhalation:	rat	OECD Guideline 422
75-28-5			gas		(Combined Repeated Dose
	NOAEL F1 21,4 mg/l				Toxicity Study with the
					Reproduction /
					Developmental Toxicity
					Screening Test)

# 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
Zinc powder - zinc dust (stabilised) 7440-66-6	NOAEL > 104 mg/kg	oral: feed	13 w daily	mouse	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
n-butyl acetate 123-86-4	NOAEL 125 mg/kg	oral: gavage	6 (interim sacrifice) or 13 w daily	rat	EPA OTS 798.2650 (90- Day Oral Toxicity in Rodents)
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)
acetone 67-64-1	NOAEL 900 mg/kg	oral: drinking water	13 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Butane, n- (< 0.1 % butadiene) 106-97-8		inhalation: gas	28 d 6 h/d	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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)
Xylene - mixture of isomeres 1330-20-7	NOAEL 150 mg/kg	oral: gavage	90 d daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

# Aspiration hazard:

No data available.

## 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	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
Zinc powder - zinc dust (stabilised) 7440-66-6	LC50	0,8 mg/l	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	OECD Guideline 203 (Fish, Acute Toxicity Test)
n-butyl acetate 123-86-4	LC50	18 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
acetone 67-64-1	LC50	8.120 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Butane, n- (< 0.1 % butadiene) 106-97-8	LC50	27,98 mg/l	96 h		not specified
Hydrocarbons, C9, aromatics 64742-95-6	LL50	9,2 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Xylene - mixture of isomeres 1330-20-7	LC50	2,6 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Xylene - mixture of isomeres 1330-20-7	NOEC	> 1,3 mg/l	56 d	Oncorhynchus mykiss	other guideline:

## 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				
n-butyl acetate	EC50	44 mg/l	48 h	Daphnia sp.	OECD Guideline 202
123-86-4					(Daphnia sp. Acute
					Immobilisation Test)
acetone	EC50	8.800 mg/l	48 h	Daphnia pulex	OECD Guideline 202
67-64-1					(Daphnia sp. Acute
					Immobilisation Test)
Butane, n- (< 0.1 % butadiene)	EC50	14,22 mg/l	48 h		not specified
106-97-8					
Hydrocarbons, C9, aromatics	EL50	3,2 mg/l	48 h	Daphnia magna	OECD Guideline 202
64742-95-6					(Daphnia sp. Acute
					Immobilisation Test)
Xylene - mixture of isomeres	EC50	3,1 mg/l	48 h	Daphnia magna	OECD Guideline 202
1330-20-7					(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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
n-butyl acetate	NOEC	23,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
123-86-4		_			magna, Reproduction Test)
acetone	NOEC	2.212 mg/l	28 d	Daphnia magna	OECD 211 (Daphnia
67-64-1					magna, Reproduction Test)
Xylene - mixture of isomeres	NOEC	0,96 mg/l	7 d	Ceriodaphnia dubia	other guideline:
1330-20-7					

## 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		_		
n-butyl acetate 123-86-4	EC50	674,7 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
n-butyl acetate 123-86-4	EC10	295,5 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
acetone 67-64-1	NOEC	530 mg/l	8 d	Microcystis aeruginosa	DIN 38412-09
Butane, n- (< 0.1 % butadiene) 106-97-8	EC50	7,71 mg/l	96 h		not specified
Hydrocarbons, C9, aromatics 64742-95-6	NOELR	1 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C9, aromatics 64742-95-6	EL50	2,9 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Xylene - mixture of isomeres 1330-20-7	EC50	4,36 mg/l	73 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Xylene - mixture of isomeres 1330-20-7	EC10	1,9 mg/l	73 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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
n-butyl acetate	IC50	356 mg/l		Ciliate (Tetrahymena	other guideline:
123-86-4				pyriformis)	
acetone	EC10	1.000 mg/l	30 min	Pseudomonas putida	DIN 38412, part 27
67-64-1					(Bacterial oxygen
					consumption test)

# 12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
n-butyl acetate 123-86-4	readily biodegradable	aerobic	83 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Propane 74-98-6	readily biodegradable	aerobic	> 60 %	28 d	OECD 301 A - F
acetone 67-64-1	readily biodegradable	aerobic	81 - 92 %	30 d	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)
Butane, n- (< 0.1 % butadiene) 106-97-8	readily biodegradable	aerobic	> 60 %	28 d	OECD 301 A - F
Hydrocarbons, C9, aromatics 64742-95-6	readily biodegradable	aerobic	78 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Isobutane 75-28-5	readily biodegradable	aerobic	71,43 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Xylene - mixture of isomeres 1330-20-7	readily biodegradable	aerobic	90 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

# 12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Xylene - mixture of isomeres	25,9	56 d		Oncorhynchus	not specified
1330-20-7				mykiss	

# 12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
n-butyl acetate 123-86-4	2,3	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
acetone 67-64-1	-0,24		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Butane, n- (< 0.1 % butadiene) 106-97-8	2,31	20 °C	other (measured)
Hydrocarbons, C9, aromatics 64742-95-6	> 4		QSAR (Quantitative Structure Activity Relationship)
Isobutane 75-28-5	2,88	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Xylene - mixture of isomeres 1330-20-7	3,16	20 °C	not specified

# 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Zinc powder - zinc dust (stabilised)	According to Annex XIII of regulation (EC) 1907/2006 a PBT and vPvB assessment shall not
7440-66-6	be conducted for inorganic substances.
n-butyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
123-86-4	Bioaccumulative (vPvB) criteria.
Propane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
74-98-6	Bioaccumulative (vPvB) criteria.
acetone	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
67-64-1	Bioaccumulative (vPvB) criteria.
Butane, n- (< 0.1 % butadiene)	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
106-97-8	Bioaccumulative (vPvB) criteria.
Hydrocarbons, C9, aromatics	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
64742-95-6	Bioaccumulative (vPvB) criteria.
Isobutane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
75-28-5	Bioaccumulative (vPvB) criteria.
Xylene - mixture of isomeres	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
1330-20-7	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

080409

# 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.

# **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
T1 (D C	15500010

AEROSOLS (Zinc powder) **IMDG** Aerosols, flammable **IATA** 

#### 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	Environmentally Hazardous
RID	Environmentally Hazardous
ADN	<b>Environmentally Hazardous</b>

**IMDG** Marine pollutant 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)

**VOC Paints and Varnishes (EU):** 

Regulatory Basis: Directive 2004/42/EC Product (sub)category: B(e) Special finishes

Phase I (from 1.1.2007): 840 g/l max. VOC content: 680 g/l

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see https://ec.europa.eu/home-affairs/what-we-do/policies/counter-terrorism/protection/implementation-explosives-precursors-legislation\_en.

### 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.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

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

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.

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:**

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