

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

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Category 3

TEROSON BOND120 SET

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

#### 1.1. Product identifier

TEROSON BOND120 SET

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

Intended use:

adhesive and sealant for direct glazing

#### 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):

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye irritation Category 2

H319 Causes serious eye irritation.

Respiratory sensitizer Category 1

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitizer

Skin sensitizer Category 1
H317 May cause an allergic skin reaction.

Specific target organ toxicity - single exposure

H335 May cause respiratory irritation. Target organ: respiratory tract irritation

Specific target organ toxicity - repeated exposure Category 2

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

### 2.2. Label elements

#### Label elements (CLP):

Hazard pictogram:



Contains Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with

1,1'-methylenebis[4-isocyanatobenzene]

4,4'- methylenediphenyl diisocyanate

Signal word: Danger

**Hazard statement:** H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

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

**Supplemental information** As from 24 August 2023 adequate training is required before industrial or professional

use.

Further information: https://www.feica.eu/PUinfo

**Precautionary statement:** P260 Do not breathe dust/fume/spray. **Prevention** P280 Wear protective gloves/eye protection.

**Precautionary statement:** 

Response

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

#### 2.3. Other hazards

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

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 ≥ 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.	Concentration	Classification	Specific Conc. Limits, M- factors and ATEs	Add.
EC Number			ractors and ATES	Information
REACH-Reg No.	20 10 21	A	1.4555 5.000 5	
Oxirane, methyl-, polymer with	20- 40 %	Acute Tox. 4, Inhalation, H332	oral:ATE = $> 5.000$ mg/kg	
oxirane, ether with 1,2,3- propanetriol (3:1), polymer with		Skin Irrit. 2, H315	inhalation:ATE = 1,5 mg/l;dust/mist	
1,1'-methylenebis[4-		Eye Irrit. 2, H319 Skin Sens. 1, H317	mg/1,dust/mist	
isocyanatobenzene]		Resp. Sens. 1, H334		
59675-67-1		STOT SE 3, H335		
		STOT RE 2, H373		
		,		
4,4'- methylenediphenyl	0,1-< 1 %	Carc. 2, H351	Eye Irrit. 2; H319; C >= 5 %	
diisocyanate		Acute Tox. 4, Inhalation, H332	Skin Irrit. 2; H315; C >= 5 %	
101-68-8		STOT RE 2, H373	Resp. Sens. 1; H334; C >= 0,1 %	
202-966-0		Eye Irrit. 2, H319	STOT SE 3; H335; C >= 5 %	
01-2119457014-47		STOT SE 3, H335		
		Skin Irrit. 2, H315		
		Resp. Sens. 1, H334		
		Skin Sens. 1, H317		

If no ATE values are displayed, please refer to LD/LC50 values in Section 11. For full text of the H - statements and other abbreviations see section 16 "Other information".

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Inhalation:

Fresh air, oxygen supply, warmth; seek specialist medical attention.

Delayed effects possible after inhalation.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If necessary, see a dermatologist.

Eye contact:

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

Ingestion:

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

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

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### 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:

All common extinguishing agents are suitable.

# Extinguishing media which must not be used for safety reasons:

High pressure waterjet

### 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.

# **6.2.** Environmental precautions

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

### 6.3. Methods and material for containment and cleaning up

Remove mechanically.

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

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

### 7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Temperatures between + 5 °C and + 35 °C

### 7.3. Specific end use(s)

adhesive and sealant for direct glazing

# **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
Limestone 1317-65-3			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Limestone 1317-65-3		1,25	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
Limestone 1317-65-3		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
Carbon black 1333-86-4		1,25	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
Carbon black 1333-86-4		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
Carbon black 1333-86-4			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Carbon black 1333-86-4		1,25	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
Carbon black 1333-86-4		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
Carbon black 1333-86-4			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
4,4'-Methylenediphenyl diisocyanate			Skin designation:	Can be absorbed through the skin.	TRGS 900
4,4'-Methylenediphenyl diisocyanate 101-68-8			STEL (Short Term Exposure Limit) factor:	1 Substance listed with both Peak factor and STEL factor. The Peak factor is supplied with the AGW values.	TRGS 900
4,4'-Methylenediphenyl diisocyanate 101-68-8		0,05	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
4,4'-Methylenediphenyl diisocyanate 101-68-8			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

# **Predicted No-Effect Concentration (PNEC):**

Name on list		ronmental Exposure Value Remarks		Value			Remarks
	Compartment	periou	mg/l	ppm	mg/kg	others	
4,4'- methylenediphenyl diisocyanate 101-68-8	aqua (freshwater)		0,0037 mg/l				
4,4'- methylenediphenyl diisocyanate 101-68-8	aqua (intermittent releases)		0,037 mg/l				
4,4'- methylenediphenyl diisocyanate 101-68-8	aqua (marine water)		0,00037 mg/l				
4,4'- methylenediphenyl diisocyanate 101-68-8	sediment (freshwater)				11,7 mg/kg		
4,4'- methylenediphenyl diisocyanate 101-68-8	sediment (freshwater)				1,17 mg/kg		
4,4'- methylenediphenyl diisocyanate 101-68-8	Soil				2,33 mg/kg		
4,4'- methylenediphenyl diisocyanate 101-68-8	Predator						no potential for bioaccumulation

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
4,4'- methylenediphenyl diisocyanate 101-68-8	Workers	inhalation	Long term exposure - local effects		0,05 mg/m3	no potential for bioaccumulation
4,4'- methylenediphenyl diisocyanate 101-68-8	Workers	inhalation	Acute/short term exposure - local effects		0,1 mg/m3	no potential for bioaccumulation
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Long term exposure - local effects		0,025 mg/m3	no potential for bioaccumulation
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Acute/short term exposure - local effects		0,05 mg/m3	no potential for bioaccumulation

#### **Biological Exposure Indices:**

Ingredient [Regulated	Parameters	Biological	Sampling time	Conc.	Basis of biol.	Remark	Additional
substance]		specimen			exposure index		Information
4,4'-Methylenediphenyl	4,4-	Creatinine in	Sampling time: End of	10 μg/g	DE BAT	BAT values	
diisocyanate	Diaminodiph	urine	shift.			reflect the	
101-68-8	enylmethane					total	
						physical load	
						of workplace	
						substances	
						absorbed	
						through	
						inhalation,	
						dermally,	
						etc. With	
						occupational	
						exposure to	
						MDI,	
						parameter	
						4,4'-	
						Diaminodiph	
						enylmethane	
						(MDA) in	
						the urine	
						covers all	
						components	
						of a complex	
						MDI	
						mixture,	
						since both	
						monomers	
						and	
						oligomers of	
						the MDI are	
						degraded	
						independent	
						of the	
						exposure	
						path of the	
						monomerous	
						MDI. In	
						contrast, the	
				1		MAK value	
						for MDI	
						takes into	
						account only	
						the monomer	
						MDI portion.	<u> </u>

### 8.2. Exposure controls:

Engineering controls:

Use only in well ventilated areas.

#### Respiratory protection:

The product should only be used at workplaces with intensive ventilation/extraction.

If intensive ventilation/extraction is not possible respiratory protection equipment with ABEK P2 filter (EN 14387) should be worn.

### 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): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >= 1 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >= 1 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

Delivery form paste Colour black

Odor Faintly, specific

Physical state solid

Melting point Not applicable, Determination technically not possible

Solidification temperature Not applicable, Product is a solid.

Initial boiling point Not applicable, Decomposes > 140°C (284°F).

Flammability The product is not flammable. Explosive limits Not applicable, Product is a solid.

Flash point  $> 200 \,^{\circ}\text{C} (> 392 \,^{\circ}\text{F})$ 

Auto-ignition temperature Not applicable, Product is a solid.

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

Insoluble

peroxide and does not decompose under foreseen conditions of use

pH Not applicable, Product reacts with water.

Viscosity (kinematic) Not applicable, Product is a solid.

Viscosity, dynamic 3.500.000 mPa.s Viscosity Physica; HT-Method

(; 23 °C (73.4 °F))

Solubility (qualitative)

(20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water Not applicable Mixture

< 0,1 hPa

Vapour pressure (20 °C (68 °F))

Density 1,28 - 1,34 g/ml density w. Waterdisplacement; HT-method

(20 °C (68 °F))
Relative vapour density:
Not applicable, Product is a solid.
Particle characteristics
Not applicable, mixture is a paste.

#### 9.2. Other information

Other information not applicable for this product

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Reaction with water, alcohols, amines.

Reacts with water: Pressure built up in closed vessel (CO2).

#### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

### 10.4. Conditions to avoid

Humidity

#### 10.5. Incompatible materials

See section reactivity.

#### 10.6. Hazardous decomposition products

At higher temperatures isocyanate may be released.

Carbon dioxide is generated under contact with moisture, leading to pressure in the cans. Danger of cans bursting!

# **SECTION 11: Toxicological information**

### General toxicological information:

Persons suffering from allergic reactions to isocyanates should avoid contact with the product.

### 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
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3- propanetriol (3:1), polymer with 1,1'- methylenebis[4- isocyanatobenzene] 59675-67-1	Acute toxicity estimate (ATE)	> 5.000 mg/kg		Expert judgement
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 2.000 mg/kg	rat	other guideline:

#### 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
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3- propanetriol (3:1), polymer with 1,1'- methylenebis[4- isocyanatobenzene] 59675-67-1	LD50	> 9.400 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 9.400 mg/kg	rabbit	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		
Oxirane, methyl-,	Acute	1,5 mg/l	dust/mist	4 h		Expert judgement
polymer with oxirane,	toxicity					
ether with 1,2,3-	estimate					
propanetriol (3:1),	(ATE)					
polymer with 1,1'-						
methylenebis[4-						
isocyanatobenzene]						
59675-67-1						

### Skin corrosion/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
4,4'- methylenediphenyl	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
diisocyanate				
101-68-8				

# Serious eye damage/irritation:

No data available.

# 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
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3- propanetriol (3:1), polymer with 1,1'- methylenebis[4- isocyanatobenzene] 59675-67-1	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3- propanetriol (3:1), polymer with 1,1'- methylenebis[4- isocyanatobenzene] 59675-67-1	sensitising	Respiratory sensitisation	guinea pig	not specified
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	Respiratory sensitisation	guinea pig	not specified

# 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
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3- propanetriol (3:1), polymer with 1,1'- methylenebis[4- isocyanatobenzene] 59675-67-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
4,4'- methylenediphenyl diisocyanate 101-68-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3- propanetriol (3:1), polymer with 1,1'- methylenebis[4- isocyanatobenzene] 59675-67-1	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

### Carcinogenicity

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

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
4,4'- methylenediphenyl diisocyanate 101-68-8	carcinogenic	inhalation: aerosol	2 y 6 h/d	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

# Reproductive toxicity:

No data available.

# 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
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] 59675-67-1	NOAEL 0,0002 mg/l	inhalation: aerosol	2 years 6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
4,4'- methylenediphenyl diisocyanate 101-68-8	NOAEL 0,0002 mg/l	inhalation: aerosol	main: 2 y; satellite:1 y 6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

### **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. 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.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] 59675-67-1	LC50	> 1.000 mg/l	96 h	not specified	not specified
4,4'- methylenediphenyl diisocyanate 101-68-8	LL50	> 100 mg/l	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)

#### **Toxicity (aquatic invertebrates):**

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] 59675-67-1	EC50	> 1.000 mg/l	48 h	not specified	not specified
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	> 100 mg/l	48 h	1 0	EU Method C.2 (Acute Toxicity for Daphnia)

### Chronic toxicity (aquatic invertebrates):

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
4,4'- methylenediphenyl	NOEC	10 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
diisocyanate					magna, Reproduction Test)
101-68-8					

### **Toxicity (Algae):**

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] 59675-67-1	EC50	> 1.640 mg/l	72 h	not specified	not specified
4,4'- methylenediphenyl diisocyanate 101-68-8	EL50	> 100 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	NOELR	100 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)

# **Toxicity (microorganisms):**

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] 59675-67-1	IC50	> 100 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	> 1.000 mg/l		predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

# 12.2. Persistence and degradability

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
4,4'- methylenediphenyl	not readily biodegradable.	aerobic	0 %	28 d	OECD Guideline 301 F (Ready
diisocyanate					Biodegradability: Manometric
101-68-8					Respirometry Test)

# 12.3. Bioaccumulative potential

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Bioconcentratio	Exposure time	Temperature	Species	Method
CAS-No.	n factor (BCF)				
4,4'- methylenediphenyl	92 - 200	28 d		Cyprinus carpio	OECD Guideline 305 E
diisocyanate					(Bioaccumulation: Flow-through
101-68-8					Fish Test)

#### 12.4. Mobility in soil

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
4,4'- methylenediphenyl	4,51	22 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
diisocyanate			Method)
101-68-8			

### 12.5. Results of PBT and vPvB assessment

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	PBT / vPvB
CAS-No.	
4,4'- methylenediphenyl diisocyanate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
101-68-8	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. 08 05 01

# **SECTION 14: Transport information**

### 14.1. UN number or ID number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

### 14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

### 14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 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):

Not applicable Not applicable benzo[a]pyrene CAS 50-32-8 Benzo(k)fluoranthene CAS 207-08-9 Benzo(b)fluoranthene CAS 205-99-2

VOC content 0,1 % (2010/75/EU)

# 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

### National regulations/information (Germany):

WGK: WGK 1: slightly hazardous to water (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 524 Hazardous substances: polyurethane production

and processing / isocyanates (M 044)
11

Storage class according to TRGS 510:

# **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:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

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

ED: Substance identified as having endocrine disrupting properties

EU OEL:

Substance with a Union workplace exposure limit

EU EXPLD 1:

Substance listed in Annex I, Reg (EC) No. 2019/1148

EU EXPLD 2

Substance listed in Annex II, Reg (EC) No. 2019/1148

SVHC:

Substance of very high concern (REACH Candidate List)

PBT:

Substance fulfilling persistent, bioaccumulative and toxic criteria

PBT/vPvB: Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very

bioaccumulative criteria

vPvB: Substance fulfilling very persistent and very bioaccumulative criteria

#### **Further information:**

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

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

#### Dear Customer,

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

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.



# Safety Data Sheet according to (EC) No 1907/2006 as amended Page 1 of 27

SDS No.: 284600

V003.0 Revision: 09.06.2023

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Replaces version from: 08.06.2023

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

#### 1.1. Product identifier

TEROSON BOND120 SET

TEROSON BOND120 SET

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

Intended use:

Primer

#### 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

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.com.

SDSinfo.Adhesive@henkel.com

### 1.4. Emergency telephone number

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

# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

### Classification (CLP):

Flammable liquids Category 2

H225 Highly flammable liquid and vapour.

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

#### 2.2. Label elements

### Label elements (CLP):



**Contains** Butanone

Ethyl acetate

Signal word:	Danger
Hazard statement:	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Supplemental information	EUH066 Repeated exposure may cause skin dryness or cracking.
Precautionary statement: Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  No smoking.  P261 Avoid breathing vapors.  P280 Wear protective gloves/eye protection.
Precautionary statement: Response	P370+P378 In case of fire: Use CO2, dry chemical, or foam for extinction.

# 2.3. Other hazards

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
Butanone 78-93-3 201-159-0 01-2119457290-43	20- 40 %	STOT SE 3, H336 Eye Irrit. 2, H319 Flam. Liq. 2, H225		EU OEL
Ethyl acetate 141-78-6 205-500-4 01-2119475103-46	20- 40 %	Flam. Liq. 2, H225 STOT SE 3, H336 Eye Irrit. 2, H319		EU OEL
n-butyl acetate 123-86-4 204-658-1 01-2119485493-29	5- < 10 %	Flam. Liq. 3, H226 STOT SE 3, H336		EU OEL
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3 223-981-9 01-2119948848-16	1-< 5 %	Acute Tox. 4, Oral, H302	oral:ATE = 676 mg/kg inhalation:ATE = 5,7211 mg/l;	
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0 01-2119950331-47	0,1-< 1 %	Skin Sens. 1, H317		
2,4-Toluene diisocyanate, homopolymer 26006-20-2	0,1-< 1 %	Skin Sens. 1, H317 Acute Tox. 4, Inhalation, H332 Eye Irrit. 2, H319	dermal:ATE = > 5.000 mg/kg	
Acrylic acid 79-10-7 201-177-9 01-2119452449-31	0,1-< 1 %	Acute Tox. 4, Dermal, H312 Skin Corr. 1A, H314 Flam. Liq. 3, H226 Acute Tox. 4, Oral, H302 Acute Tox. 4, Inhalation, H332 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 STOT SE 3, H335 Eye Dam. 1, H318	STOT SE 3; H335; C >= 1 %  =====  M acute = 1  =====  dermal:ATE = 1.100 mg/kg inhalation:ATE = 11 mg/l;vapour	EU OEL
4-isocyanatosulphonyltoluene 4083-64-1 223-810-8 01-2119980050-47	0,1-< 1 %	Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334	Eye Irrit. 2; H319; C >= 5 % STOT SE 3; H335; C >= 5 % Skin Irrit. 2; H315; C >= 5 %	

If no ATE values are displayed, please refer to LD/LC50 values in Section 11. For full text of the H - statements and other abbreviations see section 16 "Other information".

# **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. If necessary, see a dermatologist.

Eye contact:

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

Ingestion:

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

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

EYE: Irritation, conjunctivitis.

An allergic reaction cannot be excluded after repeated skin contact.

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.

# 6.3. Methods and material for containment and cleaning up

Remove with liquid-absorbing material (sand, peat, sawdust).

Dispose of contaminated material as waste according to Section 13.

### 6.4. Reference to other sections

See advice in section 8

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Avoid open flames and sources of ignition.

Use explosion proof electric equipment.

Use only non-sparking tools.

Ground/bond container and receiving equipment.

Take precautionary measures against static discharge.

#### Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

# 7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction. Storage at 5 to 25°C is recommended. Keep container in a well ventilated place.

# 7.3. Specific end use(s)

Primer

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

# 8.1. Control parameters

# **Occupational Exposure Limits**

Valid for Germany

Ingredient [Regulated substance]	nt [Regulated substance] ppm mg/m³ Value type		Short term exposure limit category / Remarks	Regulatory list	
Butanone 78-93-3 [BUTANONE]	200	600	Time Weighted Average (TWA):	Indicative	ECTLV
Butanone 78-93-3 [BUTANONE]	300	900	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Butanone 78-93-3			Skin designation:	Can be absorbed through the skin.	TRGS 900
Butanone 78-93-3	200	600	Exposure limit(s):	If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Butanone 78-93-3			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
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
Carbon black 1333-86-4		1,25	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
Carbon black 1333-86-4		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
Carbon black 1333-86-4			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
n-Butyl acetate 123-86-4	62	300	Exposure limit(s):  2  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

Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC ACID)]	10	29	Time Weighted Average (TWA):	Indicative	ECTLV
Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC ACID)]	20	59	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Acrylic acid 79-10-7	10	30	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
Acrylic acid 79-10-7			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

# **Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	- Compartment	periou	mg/l	ppm	mg/kg	others	
Butanone	aqua		55,8 mg/l		, ,		
78-93-3	(freshwater)						
Butanone	aqua (marine		55,8 mg/l				
78-93-3	water)						
Butanone	aqua		55,8 mg/l				
78-93-3	(intermittent releases)						
Butanone	sewage		709 mg/l				
78-93-3	treatment plant		709 Ilig/1				
70 73 3	(STP)						
Butanone	sediment				284,74		
78-93-3	(freshwater)				mg/kg		
Butanone	sediment				284,7		
78-93-3	(marine water)				mg/kg		
Butanone	Soil				22,5 mg/kg		
78-93-3							
Butanone	oral				1000		
78-93-3			0.24		mg/kg		
Ethyl acetate	aqua		0,24 mg/l				
141-78-6	(freshwater)		0.024/1				
Ethyl acetate 141-78-6	aqua (marine water)		0,024 mg/l				
Ethyl acetate	aqua		1,65 mg/l				
141-78-6	(intermittent		1,03 mg/1				
111 70 0	releases)						
Ethyl acetate	sewage		650 mg/l				
141-78-6	treatment plant						
	(STP)						
Ethyl acetate	sediment				1,15 mg/kg		
141-78-6	(freshwater)						
Ethyl acetate	sediment				0,115		
141-78-6	(marine water)				mg/kg		1 1:1 (:0: 1
Ethyl acetate	Air						no hazard identified
141-78-6 Ethyl acetate	Soil				0,148		
141-78-6	5011				mg/kg		
Ethyl acetate	oral				200 mg/kg		
141-78-6	orar				200 1119 119		
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						
- D-+-1 +-+-	releases)		25.6/1				
n-Butyl acetate 123-86-4	sewage treatment plant		35,6 mg/l				
123-80-4	(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	1	ļ	1		mg/kg		
n-Butyl acetate	Air						no hazard identified
123-86-4	Dog 4			1		1	
n-Butyl acetate 123-86-4	Predator						no potential for bioaccumulation
Tris(p-isocyanatophenyl) thiophosphate	aqua		0,1 mg/l			<del> </del>	oroaccumuration
4151-51-3	(freshwater)		0,1 mg/1				
Tris(p-isocyanatophenyl) thiophosphate	aqua (marine		0,01 mg/l				
4151-51-3	water)		-,g/1				
Tris(p-isocyanatophenyl) thiophosphate	aqua		1 mg/l				
4151-51-3	(intermittent						
	releases)						
Tris(p-isocyanatophenyl) thiophosphate	sewage		100 mg/l				
4151-51-3	treatment plant						
Trisco in annual 1 1 1 1 1 1 1	(STP)	1	1	1	2557	-	
Tris(p-isocyanatophenyl) thiophosphate	sediment				2557		

4151-51-3	(freshwater)		mg/kg	1
Tris(p-isocyanatophenyl) thiophosphate	sediment		155 mg/kg	
4151-51-3	(marine water)			
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	Soil		510 mg/kg	
1,3-Diisocyanatomethylbenzene	aqua	0,1 mg/l		
homopolymer 9017-01-0	(freshwater)			
1,3-Diisocyanatomethylbenzene	aqua (marine	0,01 mg/1		
homopolymer 9017-01-0	water)			
1,3-Diisocyanatomethylbenzene	aqua	0,1 mg/l		
homopolymer 9017-01-0	(intermittent releases)			
1,3-Diisocyanatomethylbenzene	sewage	0,1 mg/l		
homopolymer 9017-01-0	treatment plant (STP)			
1,3-Diisocyanatomethylbenzene	sediment		3302	
homopolymer 9017-01-0	(freshwater)		mg/kg	
1,3-Diisocyanatomethylbenzene	sediment		330 mg/kg	
homopolymer 9017-01-0	(marine water)			
1,3-Diisocyanatomethylbenzene	Soil		658 mg/kg	
homopolymer 9017-01-0				
Acrylic acid	aqua	0,003 mg/l		
79-10-7	(freshwater)			
Acrylic acid 79-10-7	aqua (marine water)	0,0003 mg/l		
Acrylic acid 79-10-7	sewage treatment plant (STP)	0,9 mg/l		
Acrylic acid	sediment		0,0236	
79-10-7	(freshwater)		mg/kg	
Acrylic acid 79-10-7	sediment (marine water)		0,00236	
Acrylic acid	Soil		mg/kg 1 mg/kg	
79-10-7				
Acrylic acid 79-10-7	oral		0,03 g/kg	
Acrylic acid 79-10-7	Air			no hazard identified
p-Toluenesulphonyl isocyanate 4083-64-1	aqua (freshwater)	0,03 mg/l		
p-Toluenesulphonyl isocyanate 4083-64-1	aqua (marine water)	0,003 mg/l		
p-Toluenesulphonyl isocyanate 4083-64-1	sewage treatment plant (STP)	0,4 mg/l		
p-Toluenesulphonyl isocyanate 4083-64-1	sediment (freshwater)		0,172 mg/kg	
p-Toluenesulphonyl isocyanate	sediment		0,017	
4083-64-1	(marine water)		mg/kg	
p-Toluenesulphonyl isocyanate	Soil		0,017	
4083-64-1			mg/kg	

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Butanone 78-93-3	Workers	dermal	Long term exposure - systemic effects		1161 mg/kg	
Butanone 78-93-3	Workers	inhalation	Long term exposure - systemic effects		600 mg/m3	
Butanone 78-93-3	General population	dermal	Long term exposure - systemic effects		412 mg/kg	
Butanone 78-93-3	General population	inhalation	Long term exposure - systemic effects		106 mg/m3	
Butanone 78-93-3	General population	oral	Long term exposure - systemic effects		31 mg/kg	
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 effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	dermal	Long term exposure - systemic effects		37 mg/kg	no hazard identified
Ethyl acetate 141-78-6	General population	inhalation	Long term exposure - systemic effects		367 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	oral	Long term exposure - systemic effects		4,5 mg/kg	no hazard identified
Ethyl acetate 141-78-6	General population	inhalation	Long term exposure - local effects		367 mg/m3	no hazard identified
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 -		300 mg/m3	no hazard identified

	1		systemic effects		
n-Butyl acetate	General	inhalation	Acute/short term	300 mg/m3	no hazard identified
123-86-4	population		exposure - local		
			effects		
n-Butyl acetate	General	dermal	Long term	6 mg/kg	no hazard identified
123-86-4	population		exposure -		
			systemic effects		
n-Butyl acetate	General	dermal	Acute/short term	6 mg/kg	no hazard identified
123-86-4	population		exposure -		
			systemic effects		
n-Butyl acetate	General	oral	Long term	2 mg/kg	no hazard identified
123-86-4	population		exposure -		
D . 1	C 1	1	systemic effects Acute/short term	2 4	1 1:1 ('C' 1
n-Butyl acetate	General	oral		2 mg/kg	no hazard identified
123-86-4	population		exposure -		
D . 1	G 1		systemic effects	25.7 / 2	1 1:1 ('C' 1
n-Butyl acetate 123-86-4	General	inhalation	Long term	35,7 mg/m3	no hazard identified
123-80-4	population		exposure - local effects		
Tri-(- i	XX71	:114:		0.047/2	
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	Workers	inhalation	Long term exposure - local	0,047 mg/m3	
4151-51-5			effects		
1.2 Diigaayanatamathyihangana	Workers	inhalation	Long term	0,345 mg/m3	+
1,3-Diisocyanatomethylbenzene homopolymer	workers	innalation	exposure - local	0,345 mg/m3	
9017-01-0			effects		
	Workers	inholotion		20 m a/m 2	no hazard identified
Acrylic acid 79-10-7	workers	inhalation	Long term exposure - local	30 mg/m3	no nazard identified
79-10-7			effects		
Acrylic acid	Workers	inhalation	Acute/short term	30 mg/m3	no hazard identified
79-10-7	Workers	iiiiaiatioii	exposure - local	30 mg/m3	no nazaru identificu
77-10-7			effects		
Acrylic acid	Workers	dermal	Acute/short term	1 mg/cm2	no hazard identified
79-10-7	Workers	German	exposure - local	i mg/cm2	no nazara racharrea
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			effects		
Acrylic acid	General	dermal	Acute/short term	1 mg/cm2	no hazard identified
79-10-7	population		exposure - local	8	
	1 1		effects		
Acrylic acid	General	inhalation	Acute/short term	3,6 mg/m3	no hazard identified
79-10-7	population		exposure - local		
	1 1		effects		
Acrylic acid	General	inhalation	Long term	3,6 mg/m3	no hazard identified
79-10-7	population		exposure - local		
			effects		
p-Toluenesulphonyl isocyanate	Workers	inhalation	Long term	3,24 mg/m3	
4083-64-1			exposure -		
			systemic effects		
p-Toluenesulphonyl isocyanate	Workers	dermal	Long term	0,92 mg/kg	
4083-64-1			exposure -		
			systemic effects		
p-Toluenesulphonyl isocyanate	General	inhalation	Long term	0,8 mg/m3	
4083-64-1	population		exposure -		
			systemic effects		
p-Toluenesulphonyl isocyanate	General	dermal	Long term	0,46 mg/kg	
4083-64-1	population		exposure -		
			systemic effects		
p-Toluenesulphonyl isocyanate	General	oral	Long term	0,46 mg/kg	
4083-64-1	population		exposure -		
			systemic effects		

# **Biological Exposure Indices:**

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	 Additional Information
Butanone	2-butanone	Urine	Sampling time: End of	2 mg/l	DE BGW	
78-93-3			shift.			
[2-Butanone; Methylethylketone]						

# 8.2. Exposure controls:

Engineering controls: Use only in well ventilated areas.

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

Delivery form liquid Colour black

Odor Of ester and keton

Physical state liquid

Melting point Not applicable, Product is a liquid

Solidification temperature  $< -50 \,^{\circ}\text{C} \, (< -58 \,^{\circ}\text{F})$ 

Initial boiling point 80 °C (176 °F)no method / method unknown

Flammability Currently under determination

Explosive limits

lower 0,82 %(V);

Upper explosion limit not applicable for safe processing practices.

Flash point -5,5 °C (22.1 °F); ASTM D3278 Setaflash Closed Cup

Auto-ignition temperature  $> 300 \, ^{\circ}\text{C} \, (> 572 \, ^{\circ}\text{F})$ 

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

11 mm2/s

peroxide and does not decompose under foreseen conditions of use

Not applicable, Product reacts with water.

Viscosity (kinematic)

(20 °C (68 °F); )

pН

Viscosity, dynamic 5 - 14 mPa.s Viscosity Physica; HT-Method

(Physica Rheolab; Instrument: Physica Rheolab;

23,0 °C (73.4 °F))

Solubility (qualitative) Partially miscible (20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water

Not applicable
Mixture

Vapour pressure 470 mbar;no method / method unknown

(55 °C (131 °F))

Vapour pressure 94 hPa

(20 °C (68 °F))

Vapour pressure 360 hPa

(50 °C (122 °F))

Density 0,98 g/cm3 calculated

(20,0 °C (68 °F))

Relative vapour density:

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

Reaction with water, alcohols, amines.

Reacts with water: Pressure built up in closed vessel (CO2).

Oxidizers.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

See section reactivity

#### 10.4. Conditions to avoid

Humidity

Heat, flames, sparks and other sources of ignition.

### 10.5. Incompatible materials

See section reactivity.

#### 10.6. Hazardous decomposition products

At higher temperatures isocyanate may be released.

Carbon dioxide is generated under contact with moisture, leading to pressure in the cans. Danger of cans bursting!

# **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
Butanone 78-93-3	LD50	2.737 mg/kg	rat	not specified
Ethyl acetate 141-78-6	LD50	6.100 mg/kg	rat	not specified
n-butyl acetate 123-86-4	LD50	10.760 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	LD50	> 675 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	Acute toxicity estimate (ATE)	676 mg/kg		Expert judgement
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	LD50	> 5.000 mg/kg	rat	not specified
Acrylic acid 79-10-7	LD50	1.500 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
4- isocyanatosulphonyltolue ne 4083-64-1	LD50	2.330 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)

### 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	Value	Species	Method
Butanone 78-93-3	LD50	> 6.400 mg/kg	rabbit	not specified
Ethyl acetate 141-78-6	LD50	> 20.000 mg/kg	rabbit	Draize Test
n-butyl acetate 123-86-4	LD50	> 14.112 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	Acute toxicity estimate (ATE)	> 5.000 mg/kg		Expert judgement
Acrylic acid 79-10-7	Acute toxicity estimate (ATE)	1.100 mg/kg		Expert judgement
Acrylic acid 79-10-7	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
4- isocyanatosulphonyltolue ne 4083-64-1	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		
Butanone	LC50	34,5 mg/l	vapour	4 h	rat	not specified
78-93-3						
Ethyl acetate	LC0	> 22,5 mg/l	dust/mist	6 h	rat	other guideline:
141-78-6						
Ethyl acetate	LC50	> 22,5 mg/l	dust/mist	6 h	rat	other guideline:
141-78-6						
n-butyl acetate	LC50	> 23,4 mg/l	mist	4 h	rat	OECD Guideline 403 (Acute
123-86-4						Inhalation Toxicity)
Phenol, 4-isocyanato-,	LC50	> 5,721 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute
phosphorothioat						Inhalation Toxicity)
4151-51-3						
Phenol, 4-isocyanato-,	Acute	5,7211 mg/l				Expert judgement
phosphorothioat	toxicity					
4151-51-3	estimate					
	(ATE)					
2,4-Toluene diisocyanate,	LC50	3,665 mg/l	dust/mist	4 h	rat	not specified
homopolymer						
26006-20-2						
Acrylic acid	LC0	5,1 mg/l	vapour	4 h	rat	equivalent or similar to OECD
79-10-7						Guideline 403 (Acute
						Inhalation Toxicity)
Acrylic acid	Acute	11 mg/l	vapour			Expert judgement
79-10-7	toxicity					
	estimate					
	(ATE)				<u> </u>	

### Skin corrosion/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Butanone 78-93-3	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Ethyl acetate 141-78-6	slightly irritating	24 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
n-butyl acetate 123-86-4	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	slightly irritating	4 h	rabbit	not specified
Acrylic acid 79-10-7	Category 1 (corrosive)	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

# Serious eye damage/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Butanone 78-93-3	irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Ethyl acetate 141-78-6	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
n-butyl acetate 123-86-4	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Acrylic acid 79-10-7	Category 1 (irreversible effects on the eye)		rabbit	BASF Test

# 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
Butanone 78-93-3	not sensitising	Buehler test	guinea pig	equivalent or similar to OECD Guideline 406 (Skin Sensitisation)
Ethyl acetate 141-78-6	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
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Acrylic acid 79-10-7	not sensitising	Freund's complete adjuvant test	guinea pig	Klecak Method
Acrylic acid 79-10-7	not sensitising	Split adjuvant test	guinea pig	Maguire Method

# 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
Butanone 78-93-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Butanone 78-93-3	negative	in vitro mammalian chromosome aberration test	not applicable		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Butanone 78-93-3	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
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)
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)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Acrylic acid 79-10-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Acrylic acid 79-10-7	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Acrylic acid 79-10-7	negative	DNA damage and repair assay, unscheduled DNA synthesis in mammalian cells in vitro	without		equivalent or similar to OECD Guideline 482 (Genetic Toxicology: DNA Damage and Repair, Unscheduled DNA Synthesis in Mammalian Cells
4- isocyanatosulphonyltolue ne 4083-64-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
4- isocyanatosulphonyltolue ne 4083-64-1	negative	in vitro mammalian chromosome aberration test	with and without		not specified
Butanone 78-93-3	negative	intraperitoneal		mouse	equivalent or similar to 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)
n-butyl acetate 123-86-4	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Acrylic acid 79-10-7	negative	oral: gavage	rat	equivalent or similar to OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)
Acrylic acid 79-10-7	negative	oral: gavage	mouse	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
Acrylic acid 79-10-7	not carcinogenic	oral: drinking water	26 - 28 m continuously	rat	male/female	OECD Guideline 451 (Carcinogenicity Studies)
Acrylic acid 79-10-7	not carcinogenic	dermal	21 m 3 times/w	mouse	male/female	not specified

# Reproductive toxicity:

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

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Butanone 78-93-3	NOAEL P 10.000 mg/l NOAEL F1 10.000 mg/l	two- generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
Ethyl acetate 141-78-6	NOAEL P 1500 ppm	other:	inhalation	rat	other guideline:
Acrylic acid 79-10-7	NOAEL P 83 mg/kg NOAEL F1 250 mg/kg	one- generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 415 (One- Generation Reproduction Toxicity Study)
Acrylic acid 79-10-7	NOAEL P 240 mg/kg NOAEL F1 53 mg/kg NOAEL F2 53 mg/kg	two- generation study	oral: drinking water	rat	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
4- isocyanatosulphonyltolue ne 4083-64-1	NOAEL F1 300 mg/kg	one- generation study	oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose 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	Species	Method
			treatment		
Butanone	NOAEL 2500 ppm	inhalation	90 days	rat	not specified
78-93-3			6 hours/day, 5 days/week		
Ethyl acetate	NOAEL 900 mg/kg	oral: gavage	90 d	rat	EPA OTS 795.2600
141-78-6			daily		(Subchronic Oral Toxicity
					Test)
n-butyl acetate	NOAEL 125 mg/kg	oral: gavage	6 (interim sacrifice)	rat	EPA OTS 798.2650 (90-
123-86-4			or 13 w		Day Oral Toxicity in
			daily		Rodents)
Acrylic acid	NOAEL 40 mg/kg	oral:	12 m	rat	equivalent or similar to
79-10-7		drinking	daily		OECD Guideline 452
		water			(Chronic Toxicity
					Studies)
Acrylic acid	NOAEL 0,015 mg/l	inhalation:	90 d	mouse	equivalent or similar to
79-10-7		vapour	6 h/d, 5 d/w		OECD Guideline 413
					(Subchronic Inhalation
					Toxicity: 90-Day)

# Aspiration hazard:

The mixture is classified based on Viscosity data.

Hazardous substances	Viscosity (kinematic)	Temperature	Method	Remarks
CAS-No.	Value			
Butanone	0,51 mm2/s	20 °C	ASTM Standard D7042	
78-93-3				

# 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.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Butanone	LC50	3.220 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish,
78-93-3					Acute Toxicity Test)
Ethyl acetate	LC50	220 mg/l	96 h	Pimephales promelas	other guideline:
141-78-6					
n-butyl acetate	LC50	18 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish,
123-86-4					Acute Toxicity Test)
Phenol, 4-isocyanato-,	LC50	Toxicity > Water		Brachydanio rerio (new name:	OECD Guideline 203 (Fish,
phosphorothioat		solubility		Danio rerio)	Acute Toxicity Test)
4151-51-3					
1,3-	LC50	> 100 mg/l	96 h	Brachydanio rerio (new name:	OECD Guideline 203 (Fish,
Diisocyanatomethylbenzene				Danio rerio)	Acute Toxicity Test)
homopolymer					
9017-01-0					
2,4-Toluene diisocyanate,	LC50	Toxicity > Water	96 h	Danio rerio	OECD Guideline 203 (Fish,
homopolymer		solubility			Acute Toxicity Test)
26006-20-2		•			
Acrylic acid	LC50	27 mg/l	96 h	Salmo gairdneri (new name:	EPA OTS 797.1400 (Fish
79-10-7				Oncorhynchus mykiss)	Acute Toxicity Test)
Acrylic acid	NOEC	>= 10,1 mg/l	45 d	Oryzias latipes	OECD Guideline 210 (fish
79-10-7					early lite stage toxicity test)
4-isocyanatosulphonyltoluene	LC50	> 45 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
4083-64-1					Acute Toxicity Test)

### **Toxicity (aquatic invertebrates):**

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Butanone 78-93-3	EC50	5.091 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)
n-butyl acetate 123-86-4	EC50	44 mg/l	48 h	Daphnia sp.	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	EC50	> 100 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	EC50	Toxicity > Water solubility	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Acrylic acid 79-10-7	EC50	95 mg/l	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
4-isocyanatosulphonyltoluene 4083-64-1	EC50	> 100 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

**Chronic toxicity (aquatic invertebrates):** 

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Ethyl acetate 141-78-6	NOEC	2,4 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
n-butyl acetate 123-86-4	NOEC	23,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Acrylic acid 79-10-7	NOEC	19 mg/l	21 d	Daphnia magna	EPA OTS 797.1330 (Daphnid Chronic Toxicity Test)

**Toxicity (Algae):** 

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Butanone 78-93-3	EC50	1.240 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Butanone 78-93-3	EC10	1.010 mg/l	96 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)
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)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	EC50	Toxicity > Water solubility		Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	NOEC	Toxicity > Water solubility		Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	EC50	> 100 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	NOEC	100 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	EC50	Toxicity > Water solubility	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acrylic acid 79-10-7	EC10	0,03 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Acrylic acid 79-10-7	EC50	0,13 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
4-isocyanatosulphonyltoluene 4083-64-1	EC50	30 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
4-isocyanatosulphonyltoluene 4083-64-1	EC10	23 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

## **Toxicity (microorganisms):**

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Butanone 78-93-3	EC50	1.150 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
Ethyl acetate 141-78-6	EC10	2.900 mg/l	18 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
n-butyl acetate 123-86-4	IC50	356 mg/l	40 h	Ciliate (Tetrahymena pyriformis)	other guideline:
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	EC50	> 1.000 mg/l	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	EC50	Toxicity > Water solubility	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Acrylic acid	EC20	900 mg/l	30 min	activated sludge, domestic	ISO 8192 (Test for

79-10-7				Inhibition of Oxygen Consumption by Activated Sludge)
4-isocyanatosulphonyltoluene	EC 50	2.511 mg/l		OECD Guideline 209
4083-64-1				(Activated Sludge,
				Respiration Inhibition Test)

## 12.2. Persistence and degradability

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Butanone 78-93-3	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Ethyl acetate 141-78-6	readily biodegradable	aerobic	100 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
n-butyl acetate 123-86-4	readily biodegradable	aerobic	83 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3		aerobic	58,2 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	not readily biodegradable.	aerobic	4 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	not inherently biodegradable	aerobic	8 %	28 d	OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))
2,4-Toluene diisocyanate, homopolymer 26006-20-2	not readily biodegradable.	aerobic	> 0 - < 60 %	28 d	OECD 301 A - F
Acrylic acid 79-10-7	inherently biodegradable	aerobic	100 %	28 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Acrylic acid 79-10-7	readily biodegradable	aerobic	81 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
4-isocyanatosulphonyltoluene 4083-64-1	readily biodegradable	aerobic	83 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

## 12.3. Bioaccumulative potential

The table below presents the data of the classified substances present in the mixture.

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:
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	< 1	56 d		Carassius sp.	not specified
Acrylic acid 79-10-7	3,16				QSAR (Quantitative Structure Activity Relationship)

### 12.4. Mobility in soil

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Butanone	0,3	40 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
78-93-3			Method)
Ethyl acetate	0,68	25 °C	EPA OPPTS 830.7560 (Partition Coefficient, n-octanol / H2O, Generator
141-78-6			Column Method)
n-butyl acetate	2,3	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
123-86-4			Method)
Phenol, 4-isocyanato-,	8,27		not specified
phosphorothioat			
4151-51-3			
Acrylic acid	0,46	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
79-10-7			Flask Method)
4-isocyanatosulphonyltoluene	0,6	30 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
4083-64-1			Method)

### 12.5. Results of PBT and vPvB assessment

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	PBT / vPvB
CAS-No.	
Butanone	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
78-93-3	Bioaccumulative (vPvB) criteria.
Ethyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
141-78-6	Bioaccumulative (vPvB) criteria.
n-butyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
123-86-4	Bioaccumulative (vPvB) criteria.
Phenol, 4-isocyanato-, phosphorothioat	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
4151-51-3	Bioaccumulative (vPvB) criteria.
1,3-Diisocyanatomethylbenzene homopolymer	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
9017-01-0	Bioaccumulative (vPvB) criteria.
Acrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-10-7	Bioaccumulative (vPvB) criteria.
4-isocyanatosulphonyltoluene	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
4083-64-1	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	1139
RID	1139
ADN	1139
IMDG	1139
IATA	1139

## 14.2. UN proper shipping name

COATING SOLUTION
COATING SOLUTION
COATING SOLUTION
COATING SOLUTION
Coating solution

## 14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

## 14.4. Packing group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

## 14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

## 14.6. Special precautions for user

ADR	Special provision 640D
	Tunnelcode: (D/E)
RID	Special provision 640D
ADN	Special provision 640D
IMDG	not applicable
IATA	not applicable

## 14.7. Maritime transport in bulk according to IMO instruments

not applicable

## **SECTION 15: Regulatory information**

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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021):

Not applicable Not applicable Hexachlorobenzene CAS 118-74-1

VOC content (2010/75/EU)

66,5 %

## 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

## National regulations/information (Germany):

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

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

BG regulations, rules, infos:

BG data sheet: BGI 621 Solvents

BG data sheet: BGI 524 Hazardous substances: polyurethane production

and processing / isocyanates (M 044)

Storage class according to TRGS 510:

3

## **SECTION 16: Other information**

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

ED: Substance identified as having endocrine disrupting properties

EU OEL:

EU EXPLD 1:

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,

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

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.

## **Annex - Exposure Scenarios:**

Exposure Scenarios for butanone (MEK) can be downloaded under the following link: https://mysds.henkel.com/index.html#/appSelection



## Safety Data Sheet according to (EC) No 1907/2006 as amended Page 1 of 12

SDS No.: 298868

V003.0

Revision: 09.06.2023

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Replaces version from: 10.03.2023

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

### 1.1. Product identifier

TEROSON BOND120 SET

TEROSON BOND120 SET

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

Intended use: cleaning tissue

### 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

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.com.

SDSinfo.Adhesive@henkel.com

## 1.4. Emergency telephone number

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

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

## Classification (CLP):

Flammable liquids Category 2

H225 Highly flammable liquid and vapour.

Serious eye irritation Category 2

H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure Category 3

H336 May cause drowsiness or dizziness.

#### 2.2. Label elements

## Label elements (CLP):

Hazard pictogram:



Contains Propan-2-ol

Signal word: Danger

**Hazard statement:** H225 Highly flammable liquid and vapour.

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

**Precautionary statement:** P210 Keep away from sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing vapors.

P280 Wear eye protection/face protection.

#### 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.

Following substances are present in a concentration ≥ 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

#### General chemical description:

cleaning tissue

#### Base substances of preparation:

isopropanol

#### 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
Propan-2-ol 67-63-0 200-661-7 01-2119457558-25	80- 100 %	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336		

If no ATE values are displayed, please refer to LD/LC50 values in Section 11. For full text of the H - statements and other abbreviations see section 16 "Other information". Declaration of ingredients according to Detergent Regulation 648/2004/EC

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

## **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

Inhalation:

Move to fresh air, 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:

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

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

EYE: Irritation, conjunctivitis.

Vapors may cause drowsiness and dizziness.

### 4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

## **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.

## 6.2. Environmental precautions

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

#### 6.3. Methods and material for containment and cleaning up

Dispose of contaminated material as waste according to Section 13.

Remove mechanically.

## 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.

Keep container in a well ventilated place.

Store in a cool, dry place.

## 7.3. Specific end use(s)

cleaning tissue

# **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
Propan-2-ol 67-63-0			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Propan-2-ol 67-63-0	200	500	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):**

Name on list	Environmental Compartment	Exposure period	Value	Value			Remarks
	, , , , , , , , , , , , , , , , , , ,	<b>P</b>	mg/l	ppm	mg/kg	others	
Propan-2-ol 67-63-0	aqua (freshwater)		140,9 mg/l				
Propan-2-ol 67-63-0	aqua (marine water)		140,9 mg/l				
Propan-2-ol 67-63-0	sediment (freshwater)				552 mg/kg		
Propan-2-ol 67-63-0	sediment (marine water)				552 mg/kg		
Propan-2-ol 67-63-0	Soil				28 mg/kg		
Propan-2-ol 67-63-0	aqua (intermittent releases)		140,9 mg/l				
Propan-2-ol 67-63-0	sewage treatment plant (STP)		2251 mg/l				
Propan-2-ol 67-63-0	oral				160 mg/kg		

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Propan-2-ol 67-63-0	Workers	dermal	Long term exposure - systemic effects		888 mg/kg	
Propan-2-ol 67-63-0	Workers	inhalation	Long term exposure - systemic effects		500 mg/m3	
Propan-2-ol 67-63-0	General population	dermal	Long term exposure - systemic effects		319 mg/kg	
Propan-2-ol 67-63-0	General population	inhalation	Long term exposure - systemic effects		89 mg/m3	
Propan-2-ol 67-63-0	General population	oral	Long term exposure - systemic effects		26 mg/kg	

#### **Biological Exposure Indices:**

Ingredient [Regulated	Parameters	Biological	Sampling time	Conc.	Basis of biol.	Remark	Additional
substance]		specimen			exposure index		Information
Propan-2-ol	acetone	Blood	Sampling time: End of	25 mg/l	DE BGW		
67-63-0			shift.				
Propan-2-ol	acetone	Urine	Sampling time: End of	25 mg/l	DE BGW		
67-63-0			shift.				
[2-PROPANOL]							

### 8.2. Exposure controls:

Engineering controls:

Use only in well ventilated areas.

Respiratory protection:

In case of dust formation, we recommend wearing of appropriate respiratory protection equipment with particle filter P (EN 14387).

This recommendation should be matched to local conditions.

Filter type: A (EN 14387)

Suitable breathing mask when there is inadequate ventilation.

### 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

Delivery form liquid, on inert carrier material

Colour white
Odor of solvent
Physical state solid

Melting point -89.5 °C (-129.1 °F)

Solidification temperature Not applicable, Product is a solid.

Initial boiling point 82 °C (179.6 °F)

Flammability Currently under determination

Explosive limits

Flash point

lower 12 %(V)

Upper explosion limit not applicable for safe processing practices.

12 °C (53.6 °F); no method / method unknown

Auto-ignition temperature Not applicable, Product is a solid.

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

peroxide and does not decompose under foreseen conditions of use

pH 9,11 Mixture is a tissue/fabric, provided pH is from applied

(20 °C (68 °F); Conc.: 100 %) solution.

Viscosity (kinematic) Not applicable, Product is a solid.

Solubility (qualitative) Insoluble (20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water
Not applicable
Mixture
Vapour pressure
48 hPa

Density 0,785 g/cm3 no method / method unknown (20  $^{\circ}$ C (68  $^{\circ}$ F))

Relative vapour density:

Not applicable, Product is a solid.

Particle characteristics

Currently under determination

#### 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.

### 10.5. Incompatible materials

See section reactivity.

### 10.6. Hazardous decomposition products

No decomposition if used according to specifications.

## **SECTION 11: Toxicological information**

## 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
Propan-2-ol	LD50	5.840 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral
67-63-0				Toxicity)

## Acute dermal toxicity:

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

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Propan-2-ol 67-63-0	LD50	12.870 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

## Acute inhalative toxicity:

No data available.

### Skin corrosion/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Propan-2-ol	slightly	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
67-63-0	irritating			

## 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		
Propan-2-ol	Category II		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye
67-63-0				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
Propan-2-ol 67-63-0	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

## Germ cell mutagenicity:

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

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Propan-2-ol 67-63-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Propan-2-ol 67-63-0	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Propan-2-ol 67-63-0	negative	intraperitoneal		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

## Carcinogenicity

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

Hazardous components	Result	Route of	Exposure	Species	Sex	Method
CAS-No.		application	time /			
			Frequency			
			of treatment			
Propan-2-ol		inhalation:	104 w	rat	male/female	OECD Guideline 451
67-63-0		vapour	6 h/d, 5 d/w			(Carcinogenicity
						Studies)

## Reproductive toxicity:

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

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Propan-2-ol 67-63-0	NOAEL P 853 mg/kg	One generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 415 (One- Generation Reproduction Toxicity Study)
Propan-2-ol 67-63-0	NOAEL P 500 mg/kg NOAEL F1 1.000 mg/kg	Two generation study	oral: gavage	rat	equivalent or similar to OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

## STOT-single exposure:

No data available.

## STOT-repeated exposure:

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

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Propan-2-ol 67-63-0		inhalation: vapour	at least 104 w 6 h/d, 5 d/w	rat	OECD Guideline 451 (Carcinogenicity Studies)

## **Aspiration hazard:**

The mixture is classified based on Viscosity data.

Hazardous substances CAS-No.	Viscosity (kinematic) Value	Temperature	Method	Remarks
Propan-2-ol	1,8 mm2/s	40 °C	ASTM Standard D7042	
67-63-0				

## 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.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Propan-2-ol	LC50	> 9.640 - 10.000 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish,
67-63-0					Acute Toxicity Test)

## **Toxicity (aquatic invertebrates):**

No data available.

### Chronic toxicity (aquatic invertebrates):

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Propan-2-ol	NOEC	30 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
67-63-0					magna, Reproduction Test)

## **Toxicity (Algae):**

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Propan-2-ol	EC50	> 1.000 mg/l	96 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
67-63-0				name: Desmodesmus	Growth Inhibition Test)
				subspicatus)	·
Propan-2-ol	NOEC	1.000 mg/l	96 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
67-63-0				name: Desmodesmus	Growth Inhibition Test)
				subspicatus)	

## Toxicity (microorganisms):

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Propan-2-ol	EC50	> 1.000 mg/l	3 h	activated sludge	OECD Guideline 209
67-63-0					(Activated Sludge,
					Respiration Inhibition Test)

## 12.2. Persistence and degradability

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
Propan-2-ol	readily biodegradable	aerobic	70 - 84 %	30 d	EU Method C.4-E (Determination
67-63-0					of the "Ready"
					BiodegradabilityClosed Bottle
					Test)

## 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	LogPow	Temperature	Method
Propan-2-ol	0,05		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
67-63-0			Flask Method)

## 12.5. Results of PBT and vPvB assessment

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	PBT / vPvB
Propan-2-ol	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
67-63-0	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.

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## **SECTION 14: Transport information**

## 14.1. UN number or ID number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

## 14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

### 14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

## 14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

## **SECTION 15: Regulatory information**

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

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

VOC content 90 %

(2010/75/EU)

### **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 1: slightly hazardous to water (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:

## **SECTION 16: Other information**

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

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

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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