

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

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SDS No.: 603975

V002.0

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Replaces version from: 19.05.2017

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

#### 1.1. Product identifier

Rubson AQUABLOCK SPRAY, all colours

Rubson AQUABLOCK SPRAY, all colours

#### **Contains:**

n-Butyl acetate

Ethyl acetate

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Rosin

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

Intended use:

Sealants/Surface protection

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

Henkel France SAS

Rue de Silly 161

92100 Boulogne Billancourt

France

Phone: +33 (1) 4684 9000 Fax-no.: +33 (1) 4684 9090

ua-productsafety.fr@henkel.com

### 1.4. Emergency telephone number

 $N^{\circ}$  d' appel d' urgence I.N.R.S.: 01 45 42 59 59 (24h)

Anti poison center Paris, France: Tel (emergency): +33.1.40.05.48.48

## **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

#### Classification (CLP):

Flammable aerosols Category 1

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

Specific target organ toxicity - single exposure Category 3

H336 May cause drowsiness or dizziness.

Target organ: Central Nervous System

Chronic hazards to the aquatic environment Category 3

H412 Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

### Label elements (CLP):

Hazard pictogram:	
Signal word:	Danger
Hazard statement:	H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects.
Supplemental information	EUH066 Repeated exposure may cause skin dryness or cracking.
Precautionary statement:	P102 Keep out of reach of children.
Precautionary statement: Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  No smoking.  P211 Do not spray on an open flame or other ignition source.  P251 Do not pierce or burn, even after use.  P261 Avoid breathing mist/vapours.  P262 Do not get in eyes, on skin, or on clothing.  P271 Use only outdoors or in a well-ventilated area.  P280 Wear protective gloves.
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of soap and water.
Precautionary statement: Storage	P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Precautionary statement: Disposal	P501 Dispose of contents/container in accordance with national regulation.

### 2.3. Other hazards

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

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

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

# General chemical description:

Sealants/Surface protection

## Base substances of preparation:

Solvent mixture

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
n-Butyl acetate 123-86-4	204-658-1 01-2119485493-29	12,5- 20 %	Flam. Liq. 3 H226 STOT SE 3 H336
Propane 74-98-6	200-827-9 01-2119486944-21	12,5- 20 %	Flam. Gas 1 H220 Press. Gas H280
Butane, n- (< 0.1 % butadiene) 106-97-8	203-448-7 01-2119474691-32	5- 10 %	Flam. Gas 1 H220 Press. Gas
Isobutane 75-28-5	200-857-2 01-2119485395-27	5- 10 %	Flam. Gas 1 H220 Press. Gas
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics 68920-06-9	272-912-9 01-2119473851-33	5- 10 %	Flam. Liq. 2 H225 Asp. Tox. 1 H304 STOT SE 3 H336 Aquatic Chronic 2 H411
Ethyl acetate 141-78-6	205-500-4 01-2119475103-46	5- < 10 %	Flam. Liq. 2 H225 STOT SE 3 H336 Eye Irrit. 2 H319
Rosin 8050-09-7	232-475-7 01-2119480418-32	1- 5 %	Skin Sens. 1 H317

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

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

### 4.1. Description of first aid measures

General information:

In case of adverse health effects seek medical advice.

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

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

Eye contact:

Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remain (intensive smarting, sensitivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital.

Ingestion:

Rinse mouth, do not induce vomiting, consult a doctor.

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

Vapors may cause drowsiness and dizziness.

May cause an allergic skin reaction.

Repeated exposure may cause skin dryness or cracking.

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

See section: Description of first aid measures

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media:

carbon dioxide, foam, powder, water spray jet, fine water spray

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

High pressure waterjet

#### 5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO2) can be released.

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

#### Additional information:

Cool endangered containers with water spray jet.

### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment.

Danger of slipping on spilled product.

Avoid contact with skin and eyes.

Ensure adequate ventilation.

#### 6.2. Environmental precautions

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

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

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

Dispose of contaminated material as waste according to Section 13.

#### 6.4. Reference to other sections

See advice in section 8

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Ventilate working rooms thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.

During processing and drying after adhesion, ventilate well. Avoid all sources of fire such as stoves and ovens. Switch off all electrical devices such as parabolic heaters, hot plates, storage heaters etc. in good time for them to have cooled down before commencing work. Avoid all sparks, including those occurring at electrical switches and devices.

Transport by automobile: leave the container wrapped in a cloth in the trunk, never in the passenger area.

Avoid skin and eye contact.

#### 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

For pressurized can: protect from direct sunshine and temperatures above 50°C.

Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

#### 7.3. Specific end use(s)

Sealants/Surface protection

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

# 8.1. Control parameters

# **Occupational Exposure Limits**

Valid for

France

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
n-Butyl acetate 123-86-4	200	940	French Short Term Limit (VLE):	Indicative limit (VL)	FVL
n-Butyl acetate 123-86-4	150	710	French Time Weighted Average (VME):	Indicative limit (VL)	FVL
Butane 106-97-8	800	1.900			
Butane 106-97-8	800	1.900	French Time Weighted Average (VME):	Indicative limit (VL)	FVL
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	400	1.400	French Time Weighted Average (VME):	Indicative limit (VL)	FVL
Rosin 8050-09-7		0,1	French Time Weighted Average (VME):	Indicative limit (VL)	FVL

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

Name on list	Environmental Compartment	Exposure period	Value				Remarks
		F	mg/l ppm mg/kg			others	
n-Butyl acetate	aqua		0,18 mg/l		0 0		
123-86-4	(freshwater)						
n-Butyl acetate	aqua (marine		0,018 mg/l				
123-86-4	water)						
n-Butyl acetate	aqua		0,36 mg/l				
123-86-4	(intermittent						
	releases)						
n-Butyl acetate	sewage		35,6 mg/l				
123-86-4	treatment plant						
	(STP)						
n-Butyl acetate	sediment				0,981		
123-86-4	(freshwater)				mg/kg		
n-Butyl acetate	sediment				0,0981		
123-86-4	(marine water)				mg/kg		
n-Butyl acetate	soil				0,0903		
123-86-4					mg/kg		
n-Butyl acetate 123-86-4	Air						
n-Butyl acetate	Predator						
123-86-4			0,26 mg/l				
Ethyl acetate 141-78-6	aqua (freshwater)		0,26 mg/1				
Ethyl acetate	aqua (marine		0,026 mg/l				
141-78-6	water)		0,026 mg/1				
Ethyl acetate	aqua		1,65 mg/l			+	+
141-78-6	(intermittent		1,03 111g/1				
141-78-0	releases)						
Ethyl acetate	sewage		650 mg/l				
141-78-6	treatment plant		030 1119 1				
	(STP)						
Ethyl acetate	sediment				1,25 mg/kg		
141-78-6	(freshwater)						
Ethyl acetate	sediment				0,125		
141-78-6	(marine water)				mg/kg		
Ethyl acetate	oral				200 mg/kg		
141-78-6							
Ethyl acetate	soil				0,24 mg/kg		
141-78-6							
Rosin	aqua		0,002 mg/l				
8050-09-7	(freshwater)						
Rosin	aqua (marine		0,0002				
8050-09-7	water)		mg/l		0.005		
Rosin	sediment				0,007		
8050-09-7	(freshwater)		1		mg/kg		
Rosin	sediment				0,001		
8050-09-7	(marine water)		+	-	mg/kg 0,0001		
Rosin 8050-09-7	soil		1		mg/kg		
Rosin	sewage		1000 mg/l		IIIg/Kg		
8050-09-7	treatment plant		1000 Hig/I				
0050-07-1	(STP)		1				
Rosin	aqua		0,016 mg/l				
8050-09-7	(intermittent		],,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	releases)						

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
n-Butyl acetate 123-86-4	Workers	inhalation	Long term exposure - systemic effects		300 mg/m3	
n-Butyl acetate 123-86-4	Workers	inhalation	Acute/short term exposure - systemic effects		600 mg/m3	
n-Butyl acetate 123-86-4	Workers	inhalation	Long term exposure - local effects		300 mg/m3	
n-Butyl acetate 123-86-4	Workers	inhalation	Acute/short term exposure - local effects		600 mg/m3	
n-Butyl acetate 123-86-4	Workers	dermal	Long term exposure - systemic effects		11 mg/kg	
n-Butyl acetate 123-86-4	Workers	dermal	Acute/short term exposure - systemic effects		11 mg/kg	
n-Butyl acetate 123-86-4	General population	inhalation	Long term exposure - systemic effects		35,7 mg/m3	
n-Butyl acetate 123-86-4	General population	inhalation	Acute/short term exposure - systemic effects		300 mg/m3	
n-Butyl acetate 123-86-4	General population	inhalation	Acute/short term exposure - local effects		300 mg/m3	
n-Butyl acetate 123-86-4	General population	dermal	Long term exposure - systemic effects		6 mg/kg	
n-Butyl acetate 123-86-4	General population	dermal	Acute/short term exposure - systemic effects		6 mg/kg	
n-Butyl acetate 123-86-4	General population	oral	Long term exposure - systemic effects		2 mg/kg	
n-Butyl acetate 123-86-4	General population	oral	Acute/short term exposure - systemic effects		2 mg/kg	
n-Butyl acetate 123-86-4	General population	inhalation	Long term exposure - local effects		35,7 mg/m3	
Ethyl acetate 141-78-6	Workers	inhalation	Acute/short term exposure - systemic effects		1468 mg/m3	
Ethyl acetate 141-78-6	Workers	inhalation	Acute/short term exposure - local effects		1468 mg/m3	
Ethyl acetate 141-78-6	Workers	dermal	Long term exposure - systemic effects		63 mg/kg	
Ethyl acetate 141-78-6	Workers	inhalation	Long term exposure - systemic effects		734 mg/m3	
Ethyl acetate 141-78-6	Workers	inhalation	Long term exposure - local effects		734 mg/m3	
Ethyl acetate 141-78-6	General population	Inhalation	Acute/short term exposure - systemic effects		734 mg/m3	
Ethyl acetate 141-78-6	General population	inhalation	Acute/short term exposure - local effects		734 mg/m3	
Ethyl acetate 141-78-6	General population	dermal	Long term exposure - systemic effects		37 mg/kg	
Ethyl acetate 141-78-6	General population	inhalation	Long term exposure - systemic effects		367 mg/m3	
Ethyl acetate 141-78-6	General population	oral	Long term exposure -		4,5 mg/kg	

			systemic effects		
Ethyl acetate 141-78-6	General population	inhalation	Long term exposure - local effects	367 mg/m3	
Rosin 8050-09-7	Workers	inhalation	Long term exposure - systemic effects	117 mg/m3	
Rosin 8050-09-7	Workers	dermal	Long term exposure - systemic effects	17 mg/kg	
Rosin 8050-09-7	General population	inhalation	Long term exposure - systemic effects	35 mg/m3	
Rosin 8050-09-7	General population	dermal	Long term exposure - systemic effects	10 mg/kg	
Rosin 8050-09-7	General population	oral	Long term exposure - systemic effects	10 mg/kg	

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

None

#### 8.2. Exposure controls:

Respiratory protection:

Suitable breathing mask when there is inadequate ventilation.

Combination filter: ABEKP (EN 14387)

This recommendation should be matched to local conditions.

#### Hand protection:

In the case of longer contact protective gloves made from chloroprene rubber are recommended according to EN 374. material thickness > 0.4 mm

Perforation time > 10 minutes

In the case of longer and repeated contact please note that in practice the penetration times may be considerably shorter than those determined according to EN 374. The protective gloves must always be checked for their suitability for use at the specific workplace (e.g. mechanical and thermal stress, product compatibility, antistatic effects, etc.). The gloves must be replaced immediately at the first signs of wear and tear. The information provided by the manufacturers and given in the relevant trade association regulations for industrial safety must always be observed. We recommend that a hand care plan is drawn up in cooperation with a glove manufacturer and the trade association in accordance with the local operating conditions.

#### Eye protection:

Goggles which can be tightly sealed.

Protective eye equipment should conform to EN166.

#### Skin protection:

Suitable protective clothing

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

### Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Appearance pressurized can

aerosol

varied, according to

coloration

Odor of solvent

Odour threshold No data available / Not applicable

pH No data available / Not applicable Melting point No data available / Not applicable

Solidification temperature No data available / Not applicable

Initial boiling point Not applicable Flash point < 0 °C (< 32 °F)

Evaporation rate No data available / Not applicable Flammability No data available / Not applicable

Explosive limits

lower 1,2 %(V)
upper 10,9 %(V)
Vapour pressure 3500 hPa
(20 °C (68 °F))

Relative vapour density: No data available / Not applicable

Density 0,8697 g/cm3

(20 °C (68 °F))

Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable
Solubility (qualitative)

Not miscible or difficult to mix

(Solvent: Water)

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

No data available / Not applicable
Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable
No data available / Not applicable
No data available / Not applicable
Oxidising properties

No data available / Not applicable

Solid content 38,2 %

#### 9.2. Other information

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

max. VOC content: 532,1 g/l

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

None if used for intended purpose.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

#### 10.4. Conditions to avoid

Temperatures over appr. 50 °C

#### 10.5. Incompatible materials

None if used properly.

### 10.6. Hazardous decomposition products

None known

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

# 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	Value	Species	Method
n-Butyl acetate 123-86-4	LD50	10.760 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics 68920-06-9	LD50	> 5.840 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
Ethyl acetate 141-78-6	LD50	6.100 mg/kg	rat	not specified
Rosin 8050-09-7	LD50	2.800 mg/kg	rat	not specified

## Acute dermal toxicity:

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

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
n-Butyl acetate	LD50	> 14.112 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
123-86-4				
Hydrocarbons, C7-C9, n-	LD50	> 2.912 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
alkanes, isoalkanes,				
cyclics				
68920-06-9				
Ethyl acetate	LD50	> 20.000 mg/kg	rabbit	Draize Test
141-78-6				
Rosin	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
8050-09-7				

## Acute inhalative toxicity:

The toxicity of the product is due to its narcotic effect after inhalation. In the event of protracted or repeated exposure, damage to health cannot be excluded.

Hazardous substances CAS-No.	Value	Value	Test atmosphere	Exposure time	Species	Method
n-Butyl acetate	LC50	> 23,4 mg/l	mist	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Propane 74-98-6	LC50	> 800000 ppm	gas	15 min	rat	not specified
Butane, n- (< 0.1 % butadiene) 106-97-8	LC50	274200 ppm	gas	4 h	rat	not specified
Isobutane 75-28-5	LC50	260200 ppm	gas	4 h	mouse	not specified
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics 68920-06-9	LC50	> 23,3 mg/l	vapour	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Ethyl acetate 141-78-6	LC50	200 mg/l		1 h	rat	not specified

#### Skin corrosion/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
n-Butyl acetate 123-86-4	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics 68920-06-9	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Ethyl acetate 141-78-6	slightly irritating	24 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Rosin 8050-09-7	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

#### Serious eye damage/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
		time	111	OPOD C 11 II 405 (A . E . T. i . i . / C . i . )
n-Butyl acetate	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
123-86-4				
Ethyl acetate	slightly		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
141-78-6	irritating			
Rosin	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
8050-09-7				

### Respiratory or skin sensitization:

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

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
n-Butyl acetate	not sensitising	Guinea pig maximisation	guinea pig	not specified
123-86-4		test		
Ethyl acetate	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
141-78-6		test		

# Germ cell mutagenicity:

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

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
n-Butyl acetate 123-86-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
n-Butyl acetate 123-86-4	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Propane 74-98-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Propane 74-98-6	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Butane, n- (< 0.1 % butadiene) 106-97-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Butane, n- (< 0.1 % butadiene) 106-97-8	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Isobutane 75-28-5	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Isobutane 75-28-5	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Ethyl acetate 141-78-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Ethyl acetate 141-78-6	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Rosin 8050-09-7	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	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Propane 74-98-6	negative			Drosophila melanogaster	not specified
Butane, n- (< 0.1 % butadiene) 106-97-8	negative			Drosophila melanogaster	not specified
Isobutane 75-28-5	negative			Drosophila melanogaster	not specified
Ethyl acetate 141-78-6	negative	oral: gavage		hamster, Chinese	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

# Carcinogenicity

No data available.

# Reproductive toxicity:

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

Hazardous substances	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
Butane, n- (< 0.1 %	NOAEL P 21,4 mg/l			rat	OECD Guideline 422
butadiene)					(Combined Repeated Dose
106-97-8	NOAEL F1 21,4 mg/l				Toxicity Study with the
					Reproduction /
					Developmental Toxicity
					Screening Test)
Ethyl acetate	NOAEL P 1.500 mg/kg	other	inhalation:	rat	other guideline:
141-78-6			vapour		

# 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
n-Butyl acetate 123-86-4	NOAEL 125 mg/kg	oral: gavage	6 (interim sacrifice) or 13 w daily	rat	EPA OTS 798.2650 (90- Day Oral Toxicity in Rodents)
Propane 74-98-6		inhalation: gas	28 d	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Butane, n- (< 0.1 % butadiene) 106-97-8		inhalation: gas	28 d	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Isobutane 75-28-5		inhalation: gas	28 d	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Ethyl acetate 141-78-6	NOAEL 900 mg/kg	oral: gavage	90 d daily	rat	EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
Ethyl acetate 141-78-6	NOAEL 1,28 mg/l	inhalation	94 d continuous	rat	EPA OTS 798.2450 (90- Day Inhalation Toxicity)

## **Aspiration hazard:**

No data available.

# **SECTION 12: Ecological information**

## General ecological information:

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

## 12.1. Toxicity

## **Toxicity (Fish):**

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
n-Butyl acetate 123-86-4	LC50	18 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Butane, n- (< 0.1 % butadiene) 106-97-8	LC50	27,98 mg/l	96 h		not specified
Hydrocarbons, C7-C9, n- alkanes, isoalkanes, cyclics 68920-06-9	LL50	> 3 - 10 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Ethyl acetate 141-78-6	LC50	270 mg/l	48 h	Leuciscus idus melanotus	DIN 38412-15
Rosin 8050-09-7	LC50		96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)

### Toxicity (Daphnia):

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
n-Butyl acetate 123-86-4	EC50	44 mg/l	48 h	Daphnia sp.	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Butane, n- (< 0.1 % butadiene) 106-97-8	EC50	14,22 mg/l	48 h		not specified
Hydrocarbons, C7-C9, n- alkanes, isoalkanes, cyclics 68920-06-9	EL50	> 4,6 - 10 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)
Rosin 8050-09-7	EL50		48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

### Chronic toxicity to aquatic invertebrates

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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
n-Butyl acetate 123-86-4	NOEC	23,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics 68920-06-9	NOELR	1 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Ethyl acetate 141-78-6	NOEC	2,4 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

# **Toxicity (Algae):**

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
n-Butyl acetate 123-86-4	EC50	674,7 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
n-Butyl acetate 123-86-4	EC10	295,5 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Butane, n- (< 0.1 % butadiene) 106-97-8	EC50	7,71 mg/l	96 h		not specified
Isobutane 75-28-5	EC50	7,71 mg/l	96 h		not specified
Hydrocarbons, C7-C9, n- alkanes, isoalkanes, cyclics 68920-06-9	EL50	> 10 - 30 mg/l	72 h	Raphidocelis subcapitata (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydrocarbons, C7-C9, n- alkanes, isoalkanes, cyclics 68920-06-9	NOELR	10 mg/l	72 h	Raphidocelis subcapitata (new name: 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)
Rosin 8050-09-7	EL50		72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Rosin 8050-09-7	NOELR		72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

# Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
n-Butyl acetate	IC50	356 mg/l	40 h	Ciliate (Tetrahymena	other guideline:
123-86-4				pyriformis)	
Ethyl acetate	EC10	2.900 mg/l	18 h		not specified
141-78-6					_
Rosin	EC20		3 h	activated sludge of a	OECD Guideline 209
8050-09-7				predominantly domestic sewage	(Activated Sludge,
					Respiration Inhibition Test)

## 12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
n-Butyl acetate 123-86-4	readily biodegradable	aerobic	83 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics 68920-06-9	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Ethyl acetate 141-78-6	readily biodegradable	aerobic	100 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Rosin 8050-09-7	readily biodegradable	aerobic	71 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

## 12.3. Bioaccumulative potential

No data available.

## 12.4. Mobility in soil

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
n-Butyl acetate	2,3	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
123-86-4			Method)
Isobutane	2,88	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
75-28-5			Flask Method)
Hydrocarbons, C7-C9, n-	5,65	25 °C	QSAR (Quantitative Structure Activity Relationship)
alkanes, isoalkanes, cyclics			
68920-06-9			
Ethyl acetate	0,6		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
141-78-6			Flask Method)
Rosin	> 3 - 6,2		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
8050-09-7			Method)

### 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
n-Butyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
123-86-4	Bioaccumulative (vPvB) criteria.
Propane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
74-98-6	Bioaccumulative (vPvB) criteria.
Butane, n- (< 0.1 % butadiene)	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
106-97-8	Bioaccumulative (vPvB) criteria.
Isobutane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
75-28-5	Bioaccumulative (vPvB) criteria.
Ethyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
141-78-6	Bioaccumulative (vPvB) criteria.
Rosin	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
8050-09-7	Bioaccumulative (vPvB) criteria.

# 12.6. Other adverse effects

No data available.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Product disposal:

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

Disposal of uncleaned packages:

Use packages for recycling only when totally empty.

Waste code 080409

# **SECTION 14: Transport information**

### 14.1. UN number

ADR	1950
RID	1950
ADN	1950
IMDG	1950
IATA	1950

# 14.2. UN proper shipping name

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

### 14.3. Transport hazard class(es)

ADR	2.1
RID	2.1
ADN	2.1
IMDG	2.1
IATA	2.1

# 14.4. Packing group

ADR RID ADN IMDG IATA

### 14.5. Environmental hazards

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

#### 14.6. Special precautions for user

ADR	not applicable
	Tunnelcode: (D)
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

# **SECTION 15: Regulatory information**

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

VOC content 61,2 % (VOCV 814.018 VOC regulation CH)

max. VOC content: 532,1 g/l

#### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

#### National regulations/information (France):

General information: Non exhaustive list of statutory and administrative legislative texts applicable to

the product:

Dangerous preparations: Dangerous mixtures :

Labour Code (articles L4411-1 to 6, R4411, R4412, R4722-10 to 12 and 26, R4724-8 to 13), relative to the declaration, classification, packing-up and labelling

of the substances.

Occupational Health: Health and safety at work:

Labour Code: Articles R 4141-1 to 16 related to the measures concerning the ventilation and cleaning up of the working premises. Articles R4141-1-3-4-11-13-16 and R4643-1 (safety training). Articles R 4323-104-105 (tank, pool).

Occupational diseases: Social Security Code (articles L461-1 to 461-8).

Occupational diseases table provided for article R 461-1 à 8 published in the manual INRS ED835, in agreement with the Labour & Solidarity Ministry.

Table No. Occupational Health:

**Environmental Protection:** 

Environmental protection:

Waste: law 92-646 and 95-101 (relative to the elimination of the waste and to the reprocessing of the materials), decree 2007-1467 2007-10-12, decree 2002-540

(relative to the classification of the hazardous waste).

Classified installations:

Law 76-663 modified (relative to the classified installations for the environmental

safety), environmental code article L 511-2 (nomenclature of the classified

installations). ICPE 4320

### **SECTION 16: Other information**

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

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

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

#### **Further information:**

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

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

#### **Annex - Exposure Scenarios:**

Exposure Scenarios for ethyl acetate can be downloaded under the following link: http://mymsds.henkel.com/mymsds/.490394..en.ANNEX\_DE.19414935.0.DE.pdf

Alternatively they can be accessed on the internet site www.mymsds.henkel.com by entering number 490394.