

Trade name: Armaflex 520

Current version : 11.0.0, issued: 06.08.2021

Replaced version: 10.0.0, issued: 28.01.2021

Region: GB

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

### 1.1 Product identifier

Trade name

**Armaflex 520**

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

**Relevant identified uses of the substance or mixture**

Adhesive for processing all flexible Armaflex insulation materials  
For industrial and professional use only

**Uses advised against**

No data available.

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

**Address**

Armacell GmbH  
Robert-Bosch-Straße 10  
48153 Münster

Telephone no. +49 (0) 251 - 7603-200

Fax no. +49 (0) 251 - 7603-561

e-mail info.de@armacell.com

**Information provided by / telephone**

Dr. Heribert Quante, Tel.: +49 (0) 251 - 7603-227

**Advice on Safety Data Sheet**

heribert.quante@armacell.com

**Address**

Armacell UK Ltd  
Mars Street  
OL9 6LY Oldham  
United Kingdom

email: info.armaform@armacell.com

### 1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Aquatic Chronic 2; H411

Eye Irrit. 2; H319

Flam. Liq. 2; H225

STOT SE 3; H336

**Classification information**

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)**

**Hazard pictograms**



GHS02



GHS07



GHS09

**Signal word**

Danger

**Hazardous component(s) to be indicated on label:**

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane  
ethyl-acetate

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acetone  
butanone

**Hazard statement(s)**

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

**Hazard statements (EU)**

EUH066 Repeated exposure may cause skin dryness or cracking.  
EUH208 Contains Rosin; colophony. May produce an allergic reaction.

**Precautionary statement(s)**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 Avoid breathing vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a POISON CENTER/doctor if you feel unwell.  
P501 Dispose of contents/container to a facility in accordance with local and national regulations.

**2.3 Other hazards**

Vapours can form an explosive mixture with air.  
PBT assessment  
The components of this product are not considered to be a PBT.  
vPvB assessment  
The components of this product are not considered to be a vPvB.

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

**3.1 Substances**

Not applicable. The product is not a substance.

**3.2 Mixtures**

**Hazardous ingredients**

No	Substance name	Classification (EC) 1272/2008 (CLP)	Additional information	%
	CAS / EC / Index / REACH no		Concentration	
1	<b>Hydrocarbons, C6-C7, isoalkanes, cyclics, &lt;5% n-hexane</b>			
	64742-49-0 926-605-8 - 01-2119486291-36	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Flam. Liq. 2; H225 STOT SE 3; H336 EUH066	> 25.00 - < 40.00	wt%
2	<b>ethyl-acetate</b>			
	141-78-6 205-500-4 607-022-00-5 01-2119475103-46	EUH066 Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	20.00 - < 25.00	wt%
3	<b>acetone</b>			
	67-64-1 200-662-2 606-001-00-8 01-2119471330-49	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	10.00 - < 20.00	wt%
4	<b>butanone</b>			
	78-93-3 201-159-0 606-002-00-3 01-2119457290-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	1.00 - < 5.00	wt%
5	<b>propan-2-ol</b>			
	67-63-0 200-661-7 603-117-00-0 01-2119457558-25	Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	1.00 - < 2.50	wt%
6	<b>Rosin; colophony</b>			
	8050-09-7 232-475-7 650-015-00-7 01-2119480418-32	Skin Sens. 1; H317	0.10 - < 1.00	wt%
7	<b>6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)</b>			

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	119-47-1 204-327-1 - 01-2119496065-33	Repr. 2; H361f	0.10 - <	1.00	wt%
8	<b>xylene</b> 1330-20-7 215-535-7 601-022-00-9 01-2119488216-32	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Acute Tox. 4; H332 Aquatic Chronic 3; H412 STOT RE 2; H373	0.10 - <	1.00	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

#### After inhalation

When inhaled remove to fresh air and seek medical aid.

#### After skin contact

When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.

#### After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get immediate ophthalmic treatment.

#### After ingestion

Do not induce vomiting. Rinse the mouth thoroughly with water. Never give anything by mouth to an unconscious person. Call a doctor immediately.

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

#### Symptoms

Headache; Dizziness; Drowsiness; Nausea; Vomiting

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Carbon dioxide; Dry chemical extinguisher; Foam; Water spray jet

#### Unsuitable extinguishing media

High power water jet

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

In the event of fire, the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO); Nitrogen oxides (NO<sub>x</sub>); Hydrogen cyanide (HCN); Hydrogen chloride (HCl)

### 5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear full protective suit. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Containers close to fire should be transferred to a safe place.

## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Exclude sources of ignition and ventilate the area. Do not inhale vapours. Remove persons to safety. Ensure adequate ventilation.

#### For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. In case of entry into waterways, soil or drains, inform the responsible authorities.

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

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

No data available.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. For personal protection see section 8.

#### General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Remove soiled or soaked clothing immediately. Avoid contact with eyes and skin. Do not inhale vapours. Provide eye wash fountain in work area. Have emergency shower available.

#### Advice on protection against fire and explosion

Keep away from sources of ignition - refrain from smoking. No sparking tools should be used. Vapours can form an explosive mixture with air. Take precautionary measures against electrostatic loading (earthing necessary during loading operations).

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

#### Technical measures and storage conditions

Keep container tightly closed in a cool, well-ventilated place. Protect from heat and direct sunlight.

#### Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

#### Incompatible products

Do not store together with: Acids; Bases; oxidizing agents; Do not store with combustible materials.

### 7.3 Specific end use(s)

No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
	2017/164/EU		
	Ethyl acetate		
	WEL short-term (15 min reference period)	1468	mg/m <sup>3</sup> 400 ppm
	WEL long-term (8-hr TWA reference period)	734	mg/m <sup>3</sup> 200 ppm
	List of approved workplace exposure limits (WELs) / EH40		
	Ethyl acetate		
	WEL short-term (15 min reference period)		400 ppm
	WEL long-term (8-hr TWA reference period)		200 ppm
2	acetone	67-64-1	200-662-2
	2000/39/EC		
	Acetone		
	WEL long-term (8-hr TWA reference period)	1210	mg/m <sup>3</sup> 500 ppm
	List of approved workplace exposure limits (WELs) / EH40		
	Acetone		
	WEL short-term (15 min reference period)	3620	mg/m <sup>3</sup> 1500 ppm
	WEL long-term (8-hr TWA reference period)	1210	mg/m <sup>3</sup> 500 ppm
3	butanone	78-93-3	201-159-0
	2000/39/EC		
	Butanone		
	WEL short-term (15 min reference period)	900	mg/m <sup>3</sup> 300 ppm
	WEL long-term (8-hr TWA reference period)	600	mg/m <sup>3</sup> 200 ppm
	List of approved workplace exposure limits (WELs) / EH40		
	Butan-2-one		
	WEL short-term (15 min reference period)	899	mg/m <sup>3</sup> 300 ppm

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	WEL long-term (8-hr TWA reference period)	600	mg/m <sup>3</sup>	200	ppm
	Comments	Sk, BMGV			
<b>4</b>	<b>propan-2-ol</b>	<b>67-63-0</b>		<b>200-661-7</b>	
<b>List of approved workplace exposure limits (WELs) / EH40</b>					
Propan-2-ol					
	WEL short-term (15 min reference period)	1250	mg/m <sup>3</sup>	500	ppm
	WEL long-term (8-hr TWA reference period)	999	mg/m <sup>3</sup>	400	ppm

### DNEL, DMEL and PNEC values

#### DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane			<b>64742-49-0</b> <b>926-605-8</b>	
	dermal	Long term (chronic)	systemic	13964	mg/kg/day
	inhalative	Long term (chronic)	systemic	5306	mg/m <sup>3</sup>
2	ethyl-acetate			<b>141-78-6</b> <b>205-500-4</b>	
	dermal	Long term (chronic)	systemic	63	mg/kg/day
	inhalative	Short term (acut)	systemic	1468	mg/m <sup>3</sup>
	inhalative	Long term (chronic)	local	734	mg/m <sup>3</sup>
	inhalative	Short term (acut)	local	1468	mg/m <sup>3</sup>
	inhalative	Long term (chronic)	systemic	734	mg/m <sup>3</sup>
3	acetone			<b>67-64-1</b> <b>200-662-2</b>	
	dermal	Long term (chronic)	systemic	186	mg/kg/day
	inhalative	Short term (acut)	local	2420	mg/m <sup>3</sup>
	inhalative	Short term (acut)	systemic	1210	mg/m <sup>3</sup>
4	butanone			<b>78-93-3</b> <b>201-159-0</b>	
	dermal	Long term (chronic)	systemic	1161	mg/kg/day
	inhalative	Long term (chronic)	systemic	600.00	mg/m <sup>3</sup>
5	propan-2-ol			<b>67-63-0</b> <b>200-661-7</b>	
	dermal	Long term (chronic)	systemic	888	mg/kg/day
	inhalative	Long term (chronic)	systemic	500	mg/m <sup>3</sup>
6	6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)			<b>119-47-1</b> <b>204-327-1</b>	
	dermal	Long term (chronic)	systemic	0.635	mg/kg/day
	dermal	Short term (acut)	systemic	3.175	mg/kg/day
	inhalative	Long term (chronic)	systemic	4.48	mg/m <sup>3</sup>
	inhalative	Short term (acut)	systemic	22.4	mg/m <sup>3</sup>

#### DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane			<b>64742-49-0</b> <b>926-605-8</b>	
	oral	Long term (chronic)	systemic	1301	mg/kg/day
	dermal	Long term (chronic)	systemic	1377	mg/kg/day
	inhalative	Long term (chronic)	systemic	1131	mg/m <sup>3</sup>
2	ethyl-acetate			<b>141-78-6</b> <b>205-500-4</b>	
	oral	Long term (chronic)	systemic	4.5	mg/kg/day
	dermal	Long term (chronic)	systemic	37	mg/kg/day
	inhalative	Short term (acut)	systemic	734	mg/m <sup>3</sup>
	inhalative	Long term (chronic)	local	367	mg/m <sup>3</sup>
	inhalative	Short term (acut)	local	734	mg/m <sup>3</sup>
	inhalative	Long term (chronic)	systemic	367	mg/m <sup>3</sup>
3	acetone			<b>67-64-1</b> <b>200-662-2</b>	
	oral	Long term (chronic)	systemic	62	mg/kg/day
	dermal	Long term (chronic)	systemic	62	mg/kg/day
	inhalative	Long term (chronic)	systemic	200	mg/m <sup>3</sup>
4	butanone			<b>78-93-3</b> <b>201-159-0</b>	
	oral	Long term (chronic)	systemic	31	mg/kg/day
	dermal	Long term (chronic)	systemic	412	mg/kg/day

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5	inhalative	Long term (chronic)	systemic	106	mg/m <sup>3</sup>
	<b>propan-2-ol</b>			<b>67-63-0</b>	
				<b>200-661-7</b>	
	oral	Long term (chronic)	systemic	26	mg/kg/day
	dermal	Long term (chronic)	systemic	319	mg/kg/day
	inhalative	Long term (chronic)	systemic	89	mg/m <sup>3</sup>
6	<b>6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)</b>			<b>119-47-1</b>	
				<b>204-327-1</b>	
	oral	Long term (chronic)	systemic	0.318	mg/kg/day
	oral	Short term (acut)	systemic	1.59	mg/kg/day
	dermal	Long term (chronic)	systemic	0.318	mg/kg/day
	dermal	Short term (acut)	systemic	1.59	mg/kg/day
	inhalative	Long term (chronic)	systemic	1.1	mg/m <sup>3</sup>
	inhalative	Short term (acut)	systemic	5.5	mg/m <sup>3</sup>

**PNEC values**

No	Substance name	ecological compartment	Type	CAS / EC no	Value
1	<b>ethyl-acetate</b>			<b>141-78-6</b>	
				<b>205-500-4</b>	
	water	fresh water		0.24	mg/L
	water	marine water		0.024	mg/L
	water	Aqua intermittent		1.65	mg/L
	water	fresh water sediment		1.15	mg/kg dry weight
	water	marine water sediment		0.115	mg/kg dry weight
	soil	-		0.148	mg/kg dry weight
	sewage treatment plant	-		650	mg/L
	secondary poisoning	-		200	mg/kg
2	<b>acetone</b>			<b>67-64-1</b>	
				<b>200-662-2</b>	
	water	fresh water		10.6	mg/L
	water	Aqua intermittent		21	mg/L
	water	marine water		1.06	mg/L
	water	fresh water sediment		30.4	mg/kg
	water	marine water sediment		3.04	mg/kg
	soil	-		29.5	mg/kg
	sewage treatment plant	-		100	mg/L
	3	<b>butanone</b>			<b>78-93-3</b>
			<b>201-159-0</b>		
water		fresh water		55.8	mg/L
water		marine water		55.8	mg/L
water		Aqua intermittent		55.8	mg/L
water		fresh water sediment		284.74	mg/kg
with reference to: dry weight					
water		marine water sediment		284.7	mg/kg
with reference to: dry weight					
soil		-		22.5	mg/kg
with reference to: dry weight					
sewage treatment plant	-		709	mg/L	
secondary poisoning	-		1000	mg/kg	
with reference to: food					
4	<b>propan-2-ol</b>			<b>67-63-0</b>	
				<b>200-661-7</b>	
	water	fresh water		140.9	mg/L
	water	Aqua intermittent		140.9	mg/L
	water	marine water		140.9	mg/L
	water	fresh water sediment		552	mg/L
	water	marine water sediment		552	mg/L
	soil	-		28	mg/kg
	sewage treatment plant	-		2251	mg/L
	secondary poisoning	-		160	mg/kg
with reference to: food					

**8.2 Exposure controls**

**Appropriate engineering controls**

Ensure adequate ventilation, local exhaust at the work station if necessary.

**Personal protective equipment**

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**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respirator AX

**Eye / face protection**

Tightly fitting safety glasses (EN 166).

**Hand protection**

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	butyl rubber		
Material thickness	>	0.7	mm
Inappropriate material	nitrile rubber		
Inappropriate material	PVC		
Inappropriate material	viton		
Inappropriate material	Natural rubber, NR		

**Other**

Fire-resistant antistatic protective clothing.

**Environmental exposure controls**

No data available.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

<b>State of aggregation</b>	
liquid	
<b>Form/Colour</b>	
liquid	
beige	
<b>Odour</b>	
like solvents	
<b>pH value</b>	
No data available	
<b>Boiling point / boiling range</b>	
Value	55 °C
Source	supplier
<b>Melting point/freezing point</b>	
No data available	
<b>Decomposition temperature</b>	
No data available	
<b>Flash point</b>	
Value	-15 °C
Source	supplier
<b>Ignition temperature</b>	
No data available	
<b>Auto-ignition temperature</b>	
Value	235 °C
Source	supplier
<b>Flammability</b>	
Not applicable	
Source	supplier
<b>Lower explosion limit</b>	
No data available	
<b>Upper explosion limit</b>	
No data available	
<b>Vapour pressure</b>	
No data available	
<b>Relative vapour density</b>	

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No data available			
<b>Relative density</b>			
Value	0.85		
Source	supplier		
<b>Density</b>			
No data available			
<b>Solubility in water</b>			
Source	supplier		
Comments	immiscible		
<b>Solubility</b>			
No data available			
<b>Partition coefficient n-octanol/water (log value)</b>			
No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
	log Pow	6.8	
	Reference temperature	25	°C
	Source	ECHA	
2	acetone	67-64-1	200-662-2
	log Pow	-0.23	
	Method	QSAR	
	Source	ECHA	
3	butanone	78-93-3	201-159-0
	log Pow	0.3	
	Reference temperature	40	°C
	Method	OECD 117	
	Source	ECHA	
4	propan-2-ol	67-63-0	200-661-7
	log Pow	0.05	
	Reference temperature	25	°C
	Source	ECHA	
5	6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)	119-47-1	204-327-1
	log Pow	6.25	
	Reference temperature	20	°C
	Method	OECD 107	
	Source	ECHA	
<b>Viscosity</b>			
Value	>	1000	mm <sup>2</sup> /s
Reference temperature		40	°C
Type	kinematic		
Source	supplier		
<b>Particle characteristics</b>			
No data available			

## 9.2 Other information

<b>Other information</b>
No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

### 10.3 Possibility of hazardous reactions

None, when used as directed.

### 10.4 Conditions to avoid

Heat, naked flames and other ignition sources.

### 10.5 Incompatible materials

strong acids; strong bases; strong oxidizing agents; combustible materials

### 10.6 Hazardous decomposition products

None, if handled according to intended use. In case of fire: see section 5.



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## SECTION 11: Toxicological information

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

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
LD50	>	5600	mg/kg bodyweight
Species	rat		
Source	ECHA		
2	acetone	67-64-1	200-662-2
LD50	>	5800	mg/kg bodyweight
Species	rat		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
3	butanone	78-93-3	201-159-0
LD50	>	2054	mg/kg bodyweight
Species	rat		
Method	OECD 423		
Source	ECHA / Read across		
4	propan-2-ol	67-63-0	200-661-7
LD50	>	5840	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
5	6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)	119-47-1	204-327-1
LD50	>	5000	mg/kg bodyweight
Species	rat		
Source	ECHA		
Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
LD50	>	20000	mg/kg bodyweight
Species	rabbit		
Source	ECHA		
2	acetone	67-64-1	200-662-2
LD50	>	15800	mg/kg bodyweight
Species	rabbit		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
3	6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)	119-47-1	204-327-1
LD50	>	10000	mg/kg bodyweight
Species	rabbit		
Source	ECHA		
Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	acetone	67-64-1	200-662-2
LC50	>	76	mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	propan-2-ol	67-63-0	200-661-7
LC50	>	10000	ppmV
Duration of exposure		6	h
State of aggregation	Vapour		
Species	rat		
Method	OECD 403		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	64742-49-0	926-605-8
Species	rabbit		
Method	OECD 404		
Source	ECHA		

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Evaluation	non-irritant		
<b>2</b>	<b>ethyl-acetate</b>	<b>141-78-6</b>	<b>205-500-4</b>
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	low-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>3</b>	<b>acetone</b>	<b>67-64-1</b>	<b>200-662-2</b>
Species	guinea pig		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>4</b>	<b>butanone</b>	<b>78-93-3</b>	<b>201-159-0</b>
Duration of exposure		4	h
Species	rabbit		
Method	OECD 404		
Source	ECHA / Read across		
Evaluation	non-irritant		
<b>5</b>	<b>propan-2-ol</b>	<b>67-63-0</b>	<b>200-661-7</b>
Species	rabbit		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>6</b>	<b>6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)</b>	<b>119-47-1</b>	<b>204-327-1</b>
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		

**Serious eye damage/irritation**

No	Substance name	CAS no.	EC no.
<b>1</b>	<b>ethyl-acetate</b>	<b>141-78-6</b>	<b>205-500-4</b>
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	low-irritant		
<b>2</b>	<b>acetone</b>	<b>67-64-1</b>	<b>200-662-2</b>
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	irritant		
Evaluation/classification	Based on available data, the classification criteria are met.		
<b>3</b>	<b>butanone</b>	<b>78-93-3</b>	<b>201-159-0</b>
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	irritant		
<b>4</b>	<b>propan-2-ol</b>	<b>67-63-0</b>	<b>200-661-7</b>
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	irritant		
Evaluation/classification	Based on available data, the classification criteria are met.		
<b>5</b>	<b>6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)</b>	<b>119-47-1</b>	<b>204-327-1</b>
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	non-irritant		

**Respiratory or skin sensitisation**

No	Substance name	CAS no.	EC no.
<b>1</b>	<b>ethyl-acetate</b>	<b>141-78-6</b>	<b>205-500-4</b>
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		
<b>2</b>	<b>acetone</b>	<b>67-64-1</b>	<b>200-662-2</b>
Route of exposure	Skin		
Species	guinea pig		

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Source	ECHA
Evaluation	non-sensitizing
Evaluation/classification	Based on available data, the classification criteria are not met.
<b>3</b>   <b>butanone</b>	<b>78-93-3</b> <b>201-159-0</b>
Route of exposure	Skin
Species	guinea pig
Method	OECD 406
Source	ECHA
Evaluation	non-sensitizing
<b>4</b>   <b>propan-2-ol</b>	<b>67-63-0</b> <b>200-661-7</b>
Route of exposure	Skin
Species	guinea pig
Method	OECD 406
Source	ECHA
Evaluation	non-sensitizing
Evaluation/classification	Based on available data, the classification criteria are not met.

#### Germ cell mutagenicity

No	Substance name	CAS no.	EC no.
<b>1</b>	<b>Hydrocarbons, C6-C7, isoalkanes, cyclics, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>926-605-8</b>
Source	ECHA / Read across		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>2</b>	<b>acetone</b>	<b>67-64-1</b>	<b>200-662-2</b>
Type of examination	in vitro gene mutation study in bacteria		
Species	Salmonella typhimurium		
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	In vitro Mammalian Chromosomal Aberration Test		
Species	Chinese hamster Ovary (CHO)		
Method	OECD 473		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	in vitro gene mutation study in mammalian cells		
Species	Mouse lymphoma cells		
Method	OECD 476		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>3</b>	<b>butanone</b>	<b>78-93-3</b>	<b>201-159-0</b>
Type of examination	in vitro gene mutation study in bacteria		
Species	Salmonella typhimurium		
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	In vitro Mammalian Chromosomal Aberration Test		
Species	rat		
Method	OECD 473		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	In vitro mammalian cell gene mutation test		
Species	Mouse lymphoma cells		
Method	OECD 476		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	In vivo mammalian somatic cell study: cytogenicity / erythrocyte micronucleus		
Species	mouse		
Method	OECD 474		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>4</b>	<b>propan-2-ol</b>	<b>67-63-0</b>	<b>200-661-7</b>
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

#### Reproduction toxicity

No	Substance name	CAS no.	EC no.
<b>1</b>	<b>Hydrocarbons, C6-C7, isoalkanes, cyclics, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>926-605-8</b>
Source	ECHA / Read across		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>2</b>	<b>acetone</b>	<b>67-64-1</b>	<b>200-662-2</b>
Route of exposure	inhalational		
NOAEC		2200	ppm

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Type of examination	Prenatal Developmental Toxicity Study		
Species	rat		
Method	OECD 414		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>3</b>	<b>butanone</b>	<b>78-93-3</b>	<b>201-159-0</b>
Route of exposure	inhalational		
Type of examination	Prenatal Developmental Toxicity Study		
Species	rat		
Method	OECD 414		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>4</b>	<b>6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)</b>	<b>119-47-1</b>	<b>204-327-1</b>
Route of exposure	oral		
NOAEL	50	mg/kg	
Species	rat (male)		
Method	OECD 421		
Source	ECHA		

#### Carcinogenicity

No	Substance name	CAS no.	EC no.
<b>1</b>	<b>Hydrocarbons, C6-C7, isoalkanes, cyclics, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>926-605-8</b>
Source	ECHA / Read across		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>2</b>	<b>acetone</b>	<b>67-64-1</b>	<b>200-662-2</b>
Route of exposure	dermal		
Type of examination	Toxicity study		
Species	mouse		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>3</b>	<b>butanone</b>	<b>78-93-3</b>	<b>201-159-0</b>
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

#### STOT - single exposure

No data available

#### STOT - repeated exposure

No	Substance name	CAS no.	EC no.
<b>1</b>	<b>Hydrocarbons, C6-C7, isoalkanes, cyclics, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>926-605-8</b>
Source	ECHA / Read across		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>2</b>	<b>acetone</b>	<b>67-64-1</b>	<b>200-662-2</b>
Route of exposure	oral		
NOAEL	10000	ppm	
Species	rat		
Method	OECD 408		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	inhalational		
NOAEC	19000	ppm	
Species	rat		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>3</b>	<b>butanone</b>	<b>78-93-3</b>	<b>201-159-0</b>
Route of exposure	inhalational		
Species	rat		
Method	OECD 413		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
<b>4</b>	<b>propan-2-ol</b>	<b>67-63-0</b>	<b>200-661-7</b>
Route of exposure	inhalational		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### 11.2 Information on other hazards

**Endocrine disrupting properties**  
No data available.

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**Other information**

No data available.

**SECTION 12: Ecological information**

**12.1 Toxicity**

<b>Toxicity to fish (acute)</b>			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	64742-49-0	926-605-8
LL50		12	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Method	OECD 203		
Source	ECHA		
2	ethyl-acetate	141-78-6	205-500-4
LC50		230	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Source	ECHA		
3	acetone	67-64-1	200-662-2
LC50		5540	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
4	butanone	78-93-3	201-159-0
LC50		2993	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Method	OECD 203		
Source	ECHA		
5	propan-2-ol	67-63-0	200-661-7
LC50		9640	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Method	OECD 203		
Source	ECHA		

**Toxicity to fish (chronic)**

No data available

**Toxicity to Daphnia (acute)**

No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
EC50		1350	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Source	ECHA		
2	acetone	67-64-1	200-662-2
EC50		8800	mg/l
Duration of exposure		48	h
Species	Daphnia pulex		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
3	butanone	78-93-3	201-159-0
EC50		308	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		
4	propan-2-ol	67-63-0	200-661-7
EC50	>	10000	mg/l
Duration of exposure		24	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

**Toxicity to Daphnia (chronic)**

No data available

**Toxicity to algae (acute)**

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No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	64742-49-0	926-605-8
EL50	Duration of exposure	26	mg/l
		72	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	ECHA		
2	butanone	78-93-3	201-159-0
EC50	Duration of exposure	2029	mg/l
		96	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	ECHA		
<b>Toxicity to algae (chronic)</b>			
No data available			
<b>Bacteria toxicity</b>			
No data available			

## 12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	64742-49-0	926-605-8
Type	aerobic biodegradation		
Value		98	%
Duration		28	day(s)
Method	OECD 301 F		
Source	ECHA		
Evaluation	readily biodegradable		
2	ethyl-acetate	141-78-6	205-500-4
Source	ECHA		
Evaluation	readily biodegradable		
3	acetone	67-64-1	200-662-2
Type	aerobic biodegradation		
Value		90.9	%
Duration		28	day(s)
Method	OECD 301 B		
Source	ECHA		
Evaluation	readily biodegradable		
4	butanone	78-93-3	201-159-0
Type	aerobic biodegradation		
Value		98	%
Duration		28	day(s)
Method	OECD 301 D		
Source	ECHA		
Evaluation	readily biodegradable		
5	propan-2-ol	67-63-0	200-661-7
Type	BOD/COD		
Value		53	%
Duration		5	day(s)
Source	ECHA		
Evaluation	readily biodegradable		

## 12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
log Pow		6.8	
Reference temperature		25	°C
Source	ECHA		
2	acetone	67-64-1	200-662-2
log Pow		-0.23	
Method	QSAR		
Source	ECHA		
3	butanone	78-93-3	201-159-0
log Pow		0.3	
Reference temperature		40	°C
Method	OECD 117		
Source	ECHA		

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4	propan-2-ol	67-63-0	200-661-7
log Pow			0.05
Reference temperature			25 °C
Source	ECHA		
5	6,6'-DI-TERT-2,2'-METHYLENEDI-P-KRESOL (BPH)	119-47-1	204-327-1
log Pow			6.25
Reference temperature			20 °C
Method	OECD 107		
Source	ECHA		

#### 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	The components of this product are not considered to be a PBT.
vPvB assessment	The components of this product are not considered to be a vPvB.

#### 12.6 Endocrine disrupting properties

No data available.

#### 12.7 Other adverse effects

No data available.

#### 12.8 Other information

Other information
Do not discharge into drains or waters and do not dispose of in public landfills.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

##### Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

### SECTION 14: Transport information

#### 14.1 Transport ADR/RID/ADN

Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1133
Proper shipping name	ADHESIVES
Special Provision 640	640D
Tunnel restriction code	D/E
Label	3
Environmentally hazardous substance mark	Symbol "fish and tree"

#### 14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1133
Proper shipping name	ADHESIVES
Technical name	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane
EmS	F-E, S-D
Label	3
Marine pollutant mark	Symbol "fish and tree"

#### 14.3 Transport ICAO-TI / IATA

Class	3
Packing group	II
UN number	UN1133
Proper shipping name	Adhesives
Label	3

#### 14.4 Other information

**Trade name:** Armaflex 520

**Current version :** 11.0.0, issued: 06.08.2021

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**Region:** GB

No data available.

#### 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

#### 14.6 Special precautions for user

To be transported always in closed, upright and safe containers. Make sure that persons handling these containers are aware of the rules of conduct in case of incident or spillage.

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

Not relevant

### SECTION 15: Regulatory information

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

##### EU regulations

###### Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

###### REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

###### Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. No 3, 40

###### Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is subject to Part I of Annex I, risk category: E2, P5b  
If the properties of the substance/product give rise to more than one classification, for the purposes of 2012/18/UE, the lowest qualifying quantities set out in Part 1 and Part 2 of Annex I shall apply.

#### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

### SECTION 16: Other information

#### Further information

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The information is based on our current knowledge however it does not represent a guarantee of product properties nor does it create any legal obligation.

#### Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

#### Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects.

#### Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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