

Trade name: Armaflex 525

Current version : 4.0.0, issued: 01.02.2022

Replaced version: 3.1.0, issued: 05.08.2021

Region: GB

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

### 1.1 Product identifier

Trade name

**Armaflex 525**

### 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 (except Armaflex Ultima)

**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

Skin Irrit. 2; H315

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:**

ethyl-acetate

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

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butanone  
Hydrocarbons, C6, isoalkanes, <5% n-hexane

**Hazard statement(s)**

H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

**Hazard statements (EU)**

EUH208 Contains 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 dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

**2.3 Other hazards**

Vapours can form an explosive mixture with air.

PBT assessment  
No data available.

vPvB assessment  
No data available.

**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>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	>= 25.00 - < 50.00	wt%
2	<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b>			
	64742-49-0 921-024-6 - 01-2119475514-35	Aquatic Chronic 2; H411 Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Asp. Tox. 1; H304	>= 10.00 - < 25.00	wt%
3	<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	>= 10.00 - < 25.00	wt%
4	<b>Hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>			
	64742-49-0 931-254-9 - 01-2119484651-34	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	>= 5.00 - < 10.00	wt%
5	<b>Colophony</b>			
	8050-09-7 232-475-7 650-015-00-7 -	Skin Sens. 1; H317	< 1.00	wt%
6	<b>zinc oxide</b>			
	1314-13-2 215-222-5 030-013-00-7 -	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 1.00	wt%

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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.

#### 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). Seek medical assistance.

#### After ingestion

Do not induce vomiting. Rinse the mouth thoroughly with water. Let plenty of water be drunk in small gulps. Call a doctor immediately.

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

#### Symptoms

Irritating to eyes, respiratory system and skin. Light-headedness; Dizziness; Headache; Nausea

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

No data available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

#### 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 monoxide (CO); Carbon dioxide (CO<sub>2</sub>); Hydrogen chloride (HCl)

### 5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## 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.

#### 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.

### 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). Do not keep the container sealed.

### 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.

#### 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. Do

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not inhale vapours. Avoid contact with eyes and skin.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - refrain from smoking. Take precautionary measures against static charges. Use explosion-proof equipment/fittings and non-sparking tools. Vapours can form an explosive mixture with air. Vapours are heavier than air and may spread along floors. Heating up leads to increase of pressure - danger of bursting.

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

**Technical measures and storage conditions**

Keep under lock and key or accessible only to specialists or people who are authorized. Protect from heat and direct sunlight.

**Recommended storage temperature**

Value 15 - 30 °C

**Storage stability**

Value max. 18 months

**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.

Appropriate Material stainless steel

**Incompatible products**

Do not store together with: oxidizing agents

**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
	<b>List of approved workplace exposure limits (WELs) / EH40</b>		
	Ethyl acetate		
	WEL short-term (15 min reference period)		400 ppm
	WEL long-term (8-hr TWA reference period)		200 ppm
2	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
	<b>List of approved workplace exposure limits (WELs) / EH40</b>		
	Butan-2-one		
	WEL short-term (15 min reference period)	899	mg/m <sup>3</sup> 300 ppm
	WEL long-term (8-hr TWA reference period)	600	mg/m <sup>3</sup> 200 ppm
	Comments	Sk, BMGV	

**DNEL, DMEL and PNEC values**

**DNEL values (worker)**

No	Substance name	CAS / EC no		
	Route of exposure	Exposure time	Effect	Value
1	ethyl-acetate	141-78-6	205-500-4	
	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>
2	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	64742-49-0	921-024-6	
	dermal	Long term (chronic)	systemic	773 mg/kg/day
	inhalative	Long term (chronic)	systemic	2035 mg/m <sup>3</sup>
3	butanone	78-93-3	201-159-0	

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	dermal	Long term (chronic)	systemic	1161	mg/kg/day
	inhalative	Long term (chronic)	systemic	600.00	mg/m <sup>3</sup>
4	<b>Hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>			<b>64742-49-0</b>	
				<b>931-254-9</b>	
	dermal	Long term (chronic)	systemic	13964	mg/kg/day
	inhalative	Long term (chronic)	systemic	5306	mg/m <sup>3</sup>

**DNEL value (consumer)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	<b>ethyl-acetate</b>			<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>
2	<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b>			<b>64742-49-0</b>	
				<b>921-024-6</b>	
	oral	Long term (chronic)	systemic	699	mg/kg/day
	dermal	Long term (chronic)	systemic	699	mg/kg/day
	inhalative	Long term (chronic)	systemic	608	mg/m <sup>3</sup>
3	<b>butanone</b>			<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
	inhalative	Long term (chronic)	systemic	106	mg/m <sup>3</sup>
4	<b>Hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>			<b>64742-49-0</b>	
				<b>931-254-9</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>

**PNEC values**

No	Substance name		CAS / EC no	
	ecological compartment	Type	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>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			

**8.2 Exposure controls**

**Appropriate engineering controls**

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

**Personal protective equipment**

**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and

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mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respirator A2/P2

**Eye / face protection**

Safety glasses with side protection shield (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 nitrile

**Other**

Chemical-resistant work clothes. 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			
colourless			
<b>Odour</b>			
like solvents			
<b>pH value</b>			
No data available			
<b>Boiling point / boiling range</b>			
Value	56	°C	
Reference substance	Naphtha		
<b>Melting point/freezing point</b>			
No data available			
<b>Decomposition temperature</b>			
No data available			
<b>Flash point</b>			
Value	-26	°C	
Reference substance	Naphtha		
<b>Ignition temperature</b>			
No data available			
<b>Flammability</b>			
No data available			
<b>Lower explosion limit</b>			
Value	1	% vol	
Reference substance	Naphtha		
<b>Upper explosion limit</b>			
Value	12.8	% vol	
Reference substance	Ethyl acetate		
<b>Vapour pressure</b>			
Value	21	kPa	
Reference temperature	20	°C	
Reference substance	Naphtha		
<b>Relative vapour density</b>			
No data available			
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value	appr. 0.84	g/cm <sup>3</sup>	
Reference temperature	20	°C	

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Solubility in water			
Comments	immiscible		
Solubility			
No data available			
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	butanone	78-93-3	201-159-0
log Pow		0.3	
Reference temperature		40 °C	
Method		OECD 117	
Source		ECHA	
Viscosity			
Value	appr.	450	mPa*s
Reference temperature		20	°C
Type	dynamic		
Solvent content			
Value	appr.	82	%
Solids content			
Value	appr.	18	%
Particle characteristics			
No data available			

## 9.2 Other information

Other information
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

No data available.

### 10.4 Conditions to avoid

Protect from heat and direct sunlight.

### 10.5 Incompatible materials

strong oxidizing agents

### 10.6 Hazardous decomposition products

None, if handled according to intended use.

## 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	butanone	78-93-3	201-159-0
LD50		2054 mg/kg bodyweight	
Species		rat	
Method		OECD 423	
Source		ECHA / Read across	
3	Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-0	931-254-9
LD50		16750 mg/kg bodyweight	
Species		rat	

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Method	OECD 401
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
<b>4</b>	<b>zinc oxide</b> <b>1314-13-2</b> <b>215-222-5</b>
LD50	> 5000 mg/kg bodyweight
Species	rat
Method	OECD 401
Source	ECHA

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
<b>1</b>	<b>ethyl-acetate</b>	<b>141-78-6</b>	<b>205-500-4</b>
LD50	>	20000	mg/kg bodyweight
Species	rabbit		
Source	ECHA		
<b>2</b>	<b>Hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>931-254-9</b>
LD50	>	3350	mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
<b>1</b>	<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>921-024-6</b>
LC50	>	25.2	mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Source	ECHA		
<b>2</b>	<b>Hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>931-254-9</b>
LC50		259.3	mg/l
Duration of exposure		4	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.
<b>1</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>2</b>	<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>921-024-6</b>
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	irritant		
<b>3</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		

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>butanone</b>	<b>78-93-3</b>	<b>201-159-0</b>
Species	rabbit		
Method	OECD 405		



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Source Evaluation	ECHA irritant
<b>3</b>	<b>Hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b> <b>64742-49-0</b> <b>931-254-9</b>
Duration of exposure	72 h
Species	rabbit
Method	OECD 405
Source	ECHA
Evaluation	non-irritant
Evaluation/classification	Based on available data, the classification criteria are not met.

#### 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>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>3</b>	<b>Hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>931-254-9</b>
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
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>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>2</b>	<b>Hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>931-254-9</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>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>2</b>	<b>Hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>	<b>64742-49-0</b>	<b>931-254-9</b>
Route of exposure	inhalational		
NOAEC	9000		ppm

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Duration of exposure	13	week/s
Type of examination	2 generation study	
Species	rat	
Method	OECD 416	
Source	ECHA	
Evaluation/classification	Based on available data, the classification criteria are not met.	

Carcinogenicity			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-0	931-254-9
Route of exposure		inhalational	
NOAEC		9018	ppm
Duration of exposure		2	year(s)
Species	mouse		
Method	OECD 451		
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.
1	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	64742-49-0	921-024-6
Route of exposure		inhalational	
NOAEC		14000	mg/m <sup>3</sup>
Species	rat		
Source	ECHA		
2	butanone	78-93-3	201-159-0
Route of exposure		inhalational	
Species	rat		
Method	OECD 413		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
3	Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-0	931-254-9
Route of exposure		inhalational	
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Aspiration hazard			
No data available			

## 11.2 Information on other hazards

### Endocrine disrupting properties

No data available.

### Other information

No data available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
LC50		230	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Source	ECHA		
2	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	64742-49-0	921-024-6
LC50		11.4	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Method	OECD 203		
Source	ECHA		
3	butanone	78-93-3	201-159-0

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LC50	2993	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	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	64742-49-0	921-024-6
EL50		3	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		
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		

**Toxicity to Daphnia (chronic)**

No data available

**Toxicity to algae (acute)**

No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	64742-49-0	921-024-6
EL50		30	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	ECHA		
2	butanone	78-93-3	201-159-0
EC50		2029	mg/l
Duration of exposure		96	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	ECHA		

**Toxicity to algae (chronic)**

No data available

**Bacteria toxicity**

No data available

**12.2 Persistence and degradability**

Biodegradability			
No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
Source	ECHA		
Evaluation	readily biodegradable		
2	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	64742-49-0	921-024-6
Value		98	%
Duration		28	day(s)
Method	OECD 301 F		
Source	ECHA		
Evaluation	readily biodegradable		
3	butanone	78-93-3	201-159-0
Type	aerobic biodegradation		
Value		98	%
Duration		28	day(s)

Trade name: Armaflex 525

Current version : 4.0.0, issued: 01.02.2022

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Region: GB

Method	OECD 301 D
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	butanone	78-93-3	201-159-0
	log Pow	0.3	
	Reference temperature	40	°C
	Method	OECD 117	
	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	No data available.
vPvB assessment	No data available.

### 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

Waste code 08 04 09\* waste adhesives and sealants containing organic solvents or other hazardous substances

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

#### Packaging

Waste code 15 01 10\* packaging containing residues of or contaminated by hazardous substances

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, n-alkanes, isoalkanes, cyclics, <5% n-hexane

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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**

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**

No data available.

**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**

<b>Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)</b>	
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.	
<b>REACH candidate list of substances of very high concern (SVHC) for authorisation</b>	
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.	
<b>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</b>	
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 3, 40
<b>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances</b>	
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.	
<b>Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)</b>	
VOC content	82 %
<b>Other regulations</b>	
Adhere to the national sanitary and occupational safety regulations when using this product.	

**15.2 Chemical safety assessment**

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

**SECTION 16: Other information**

**Further information**

Authors responsible for the compilation of the material safety data sheet: UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de.

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)**

EUH066 Repeated exposure may cause skin dryness or cracking.  
H304 May be fatal if swallowed and enters airways.  
H317 May cause an allergic skin reaction.

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**Region:** GB

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H400  
H410

Very toxic to aquatic life.  
Very toxic 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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