

Trade name: ArmaFlex RS850

Current version: 6.0.0, issued: 29.08.2023 Replaced version: 5.0.0, issued: 01.02.2022 Region: GB

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

1.1 Product identifier

Trade name

ArmaFlex RS850

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

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

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Deutschland

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Advice on Safety Data Sheet

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Address

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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 3; H412 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





word

Signal word Danger

Hazardous component(s) to be indicated on label:

butanone



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ethyl-acetate methylcyclohexane acetone

Hazard statement(s)

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Hazard statements (EU)

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.
P312 Call a POISON CENTER/doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.

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 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		Additio	onal information		
	CAS / EC / Index /	Classification (EC) 1272/2008 (CLP)	Conce	ntration		%
	REACH no					
1	butanone					
	78-93-3	Flam. Liq. 2; H225	>=	25.00 - <	50.00	wt%
	201-159-0	Eye Irrit. 2; H319				
	606-002-00-3	STOT SE 3; H336				
	01-2119457290-43	EUH066				
2	ethyl-acetate					
	141-78-6	EUH066	>=	25.00 - <	50.00	wt%
	205-500-4	Eye Irrit. 2; H319				
	607-022-00-5	Flam. Liq. 2; H225				
	01-2119475103-46	STOT SE 3; H336				
3	methylcyclohexane			er to footnote (1)		
	108-87-2	Flam. Liq. 2; H225	>=	10.00 - <	25.00	wt%
	203-624-3	Asp. Tox. 1; H304				
	601-018-00-7	Skin Irrit. 2; H315				
	01-2119556887-18	STOT SE 3; H336				
		Aquatic Acute 1; H400				
		Aquatic Chronic 2; H411				
4	acetone	[E		10.00	0= 00	101
	67-64-1	Flam. Liq. 2; H225	>=	10.00 - <	25.00	wt%
	200-662-2	Eye Irrit. 2; H319				
	606-001-00-8	STOT SE 3; H336				
	01-2119471330-49	EUH066				
5	Rosin; colophony	00		1.00		10/
	8050-09-7	Skin Sens. 1; H317	<	1.00		wt%
	232-475-7					
	650-015-00-7					
6	01-2119480418-32					
6	zinc oxide	A		4.00		40/
	1314-13-2	Aquatic Acute 1; H400	<	1.00		wt%
	215-222-5	Aquatic Chronic 1; H410				
	030-013-00-7					
L	-		_1			

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

(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

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 eve contact

Remove contact lenses, irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart and seek medical advice

After ingestion

Do not induce vomiting. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

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 (CO2)

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

Exclude sources of ignition and ventilate the area. Do not inhale vapours. Refer to protective measures listed in sections 7 and 8.

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

Pick up rest with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). When collected, handle material as described under the section heading "Disposal considerations".

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).

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.

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Advice on protection against fire and explosion

Keep away from sources of ignition - refrain from smoking. Take precautionary measures against static charges.

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.

Storage stability

Value

36

months

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage.

Incompatible products

Do not store together with: explosive substances; spontaneously combusting substances

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	butanone	78-93-3		201-159-0	
	2000/39/EC				
	Butanone				
	WEL short-term (15 min reference period)	900	mg/m³	300	ppm
	WEL long-term (8-hr TWA reference period)	600	mg/m³	200	ppm
	List of approved workplace exposure limits (WELs) / EH40				
	Butan-2-one				
	WEL short-term (15 min reference period)	899	mg/m³	300	ppm
	WEL long-term (8-hr TWA reference period)	600	mg/m³	200	ppm
	Comments	Sk, BMGV			
2	ethyl-acetate	141-78-6		205-500-4	
	2017/164/EU				
	Ethyl acetate				
	WEL short-term (15 min reference period)	1468	mg/m³	400	ppm
	WEL long-term (8-hr TWA reference period)	734	mg/m³	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
3	acetone	67-64-1		200-662-2	
	2000/39/EC				
	Acetone				
	WEL long-term (8-hr TWA reference period)	1210	mg/m³	500	ppm
	List of approved workplace exposure limits (WELs) / EH40				
	Acetone	,			
	WEL short-term (15 min reference period)	3620	mg/m³	1500	ppm
	WEL long-term (8-hr TWA reference period)	1210	mg/m³	500	ppm
4	Rosin; colophony	8050-09-7		232-475-7	
	List of approved workplace exposure limits (WELs) / EH40				
	Rosin-based solder flux fume				
	WEL short-term (15 min reference period)	0.15	mg/m³		
	WEL long-term (8-hr TWA reference period)	0.05	mg/m³		
	Comments	Sen			

DNEL, DMEL and PNEC values

DNEL values (worker)

	Dite values (Worker)						
No	Substance name			CAS / EC no			
	Route of exposure	Exposure time	Effect	Value			
1	butanone			78-93-3			
			201-159-0				
	dermal	Long term (chronic)	systemic	1161	mg/kg/day		
	inhalative	Long term (chronic)	systemic	600	mg/m³		
	inhalative	Short term (acut)	systemic	900	mg/m³		



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2	ethyl-acetate			141-78-6 205-500-4	
	dermal	Long term (chronic)	systemic	63	mg/kg/day
	inhalative	Long term (chronic)	systemic	734	mg/m³
	inhalative	Short term (acut)	systemic	1468	mg/m³
	inhalative	Long term (chronic)	local	734	mg/m³
	inhalative	Short term (acut)	local	1468	mg/m³
3	acetone			67-64-1	
				200-662-2	
	dermal	Long term (chronic)	systemic	186	mg/kg/day
	inhalative	Short term (acut)	local	2420	mg/m³
	inhalative	Short term (acut)	systemic	1210	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC r	10
	Route of exposure	Exposure time	Effect	Value	
1	butanone			78-93-3	
				201-159-0	
	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/m³
	inhalative	Short term (acut)	systemic	450	mg/m³
2	ethyl-acetate			141-78-6	
				205-500-4	
	oral	Long term (chronic)	systemic	4.5	mg/kg/day
	dermal	Long term (chronic)	systemic	37	mg/kg/day
	inhalative	Long term (chronic)	systemic	367	mg/m³
	inhalative	Short term (acut)	systemic	734	mg/m³
	inhalative	Long term (chronic)	local	367	mg/m³
	inhalative	Short term (acut)	local	734	mg/m³
3	acetone			67-64-1	
				200-662-2	
	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/m³

PNEC values

	PNEC values			
No	Substance name		CAS / EC n	10
	ecological compartment	Туре	Value	
1	ethyl-acetate		141-78-6	
			205-500-4	
	water	fresh water	0.24	mg/L
	water	marine water	0.024	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	-	0.2	g/kg
	with reference to: food			
2	acetone		67-64-1	
			200-662-2	
	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

8.2 Exposure controls

Appropriate engineering controls

No data available.

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 insufficient ventilation and during spray application respiratory protection necessary. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

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Eye / face protection

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 0.6 - 0.8 mm Breakthrough time 60 - 120 min

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation liquid			
Form			
pasty			
Colour			
yellow			
Odour			
characteristic			
PH value No data available			
Boiling point / boiling range			
Value		55	°C
Melting point/freezing point			
No data available			
Decomposition temperature			
No data available			
Flash point			
Value		-17	°C
Ignition temperature		000	00
Value		260	°C
Auto-ignition temperature Comments	Product is not selfigr	niting	
Explosive properties	1 Toddet is flot schigi	nung.	
The product does not have explosive properties.			
Flammability			
No data available			
Lower explosion limit	_		
Value		1.1	% vol
Upper explosion limit		44.5	0/
Value		11.5	% vol
Vapour pressure Value	1	105	hPa
Reference temperature		20	°C
Relative vapour density			
No data available			
Relative density			
No data available			
Density		2.2.12	
Value		0.842	g/cm ³

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Solubility in water Comments immiscible	Б,			00	00			
Comments immiscible Solubility No data available Partition coefficient n-octanol/water (log value) No Substance name CAS no. EC no. 1 butanone 78-93-3 201-159-0 log Pow 0.3 Reference temperature Source ECHA 141-78-6 205-500-4 log Pow 0.68 C Source ECHA 3 acetone 20 °C Source ECHA Source Source ECHA Source CO-662-2 Source <th c<="" td=""><td>Refe</td><td>rence temperature</td><td></td><td>20</td><td>°C</td><td></td><td></td></th>	<td>Refe</td> <td>rence temperature</td> <td></td> <td>20</td> <td>°C</td> <td></td> <td></td>	Refe	rence temperature		20	°C		
Solubility No data available Partition coefficient n-octanol/water (log value) No Substance name								
No data available	Com	ments	immiscible					
No data available	Solu	bility						
No Substance name CAS no. EC no. 1 butanone 78-93-3 201-159-0 log Pow 0.3 Reference temperature 40 °C Method OECD 117 ECHA 205-500-4 log Pow 0.68 25 °C Reference temperature ECHA 25 °C Source ECHA 200-662-2 C log Pow -0.23 C C Method QSAR C C Source ECHA S500 mPa*s Reference temperature 20 °C Type dynamic Solvent content Solvent content Solvent content Solvent content Value 80.4 % Particle characteristics								
No Substance name CAS no. EC no. 1 butanone 78-93-3 201-159-0 log Pow 0.3 Reference temperature 40 °C Method OECD 117 ECHA 205-500-4 log Pow 0.68 25 °C Reference temperature ECHA 25 °C Source ECHA 200-662-2 C log Pow -0.23 C C Method QSAR C C Source ECHA S500 mPa*s Reference temperature 20 °C Type dynamic Solvent content Solvent content Solvent content Solvent content Value 80.4 % Particle characteristics	Parti	tion coefficient n-octanol/water (log value)						
Og Pow Reference temperature Ado °C	No			CAS no.		EC no.		
Reference temperature	1	butanone		78-93-3		201-159-0		
Method Source ECHA								
ECHA 2 ethyl-acetate 141-78-6 205-500-4 log Pow 0.68 25 °C Source ECHA 25 °C 3 acetone 67-64-1 200-662-2 log Pow -0.23 4 Method QSAR ECHA Source ECHA 8500 mPa*s Reference temperature 20 °C Type dynamic Solvent content Value 80.4 % Solids content Value 19.5 % Particle characteristics					40	°C		
2 ethyl-acetate 141-78-6 205-500-4 log Pow Reference temperature 0.68 25 °C Source ECHA 3 acetone 67-64-1 200-662-2 log Pow Method Source QSAR ECHA Kinematic viscosity 8500 mPa*s 20 °C Value Reference temperature 8500 mPa*s 20 °C Type dynamic Solvent content Value 80.4 % Solids content Value 19.5 % Particle characteristics								
O.68 Reference temperature Reference temperature			LECHA	444.70.0		005 500 4		
Reference temperature 25 °C Source ECHA 3 acetone 67-64-1 200-662-2 log Pow -0.23 Method QSAR Source ECHA Kinematic viscosity Value 8500 mPa*s Reference temperature 20 °C Type dynamic Solvent content Value 80.4 % Solids content Value 19.5 % Particle characteristics				141-78-6	0.00	205-500-4		
Source ECHA Source ECHA Source G7-64-1 G7-6						°C		
3 acetone 67-64-1 200-662-2 log Pow Method Source QSAR ECHA Walue Reference temperature Type 8500 mPa*s Reference temperature 20 °C Type dynamic Solvent content Value 80.4 % Solids content Value 19.5 % Particle characteristics			ECHA		23	C		
Iog Pow			LOUIA	67-64-1		200-662-2		
Method Source QSAR ECHA Kinematic viscosity 8500 mPa*s Value 8500 °C Type dynamic Solvent content Value 80.4 % Solids content Value 19.5 % Particle characteristics				07-04-1	-0.23			
Kinematic viscosity Value 8500 mPa*s Reference temperature 20 °C Type dynamic Solvent content Value 80.4 % Solids content Value 19.5 % Particle characteristics			QSAR		0.20			
Value 8500 mPa*s Reference temperature 20 °C Type dynamic Solvent content Value 80.4 % Solids content Value 19.5 % Particle characteristics								
Value 8500 mPa*s Reference temperature 20 °C Type dynamic Solvent content Value 80.4 % Solids content Value 19.5 % Particle characteristics	Kine	matic viscosity						
Reference temperature 20 °C Type dynamic Solvent content Value 80.4 % Solids content Value 19.5 % Particle characteristics				8500	mPa*s			
Type dynamic Solvent content 80.4 % Value 80.4 % Solids content 19.5 % Particle characteristics								
Value 80.4 % Solids content 19.5 % Value 19.5 % Particle characteristics	Туре		dynamic					
Solids content Value 19.5 % Particle characteristics	Solv	ent content						
Value 19.5 % Particle characteristics	Value	9		80.4	%			
Value 19.5 % Particle characteristics	Solid	ds content						
	Value	9		19.5	%			
	Parti	cle characteristics						

9.2 Other information

<i>.</i>	5.2 Strict information	
	Other information	
	No data available.	

SECTION 10: Stability and reactivity

10.1 Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use.

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

No data available.

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

Acut	Acute oral toxicity						
No	Substance name	CAS no.	EC no.				
1	butanone	78-93-3	201-159-0				
LD50		2054	mg/kg bodyweight				
Spec	ies	rat					
Meth	od	OECD 423					
Sour	ce	ECHA / Read across					
2	ethyl-acetate	141-78-6	205-500-4				



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LD50	>	5600	mg/kg bodyweight	
Species	rat			
Source	ECHA			
3 acetone	67-64-1		200-662-2	
LD50		5800	mg/kg bodyweight	
Species	rat			
Source	ECHA			
Evaluation/classification	Based on available data, th	Based on available data, the classification criteria are not met.		
_ raidation/olaconication				
4 zinc oxide	1314-13-2		215-222-5	
	,	5000	215-222-5 mg/kg bodyweight	
4 zinc oxide	1314-13-2	5000		
4 zinc oxide LD50	1314-13-2	5000		
4 zinc oxide LD50 Species	1314-13-2 > rat	5000		

Acute dermal toxicity						
No	Substance name	CAS no.		EC no.		
1	ethyl-acetate	141-78-6		205-500-4		
LD50		>	20000	mg/kg bodyweight		
Spec		rabbit ECHA				
2	acetone	67-64-1		200-662-2		
LD50		>	15800	mg/kg bodyweight		
Spec		rabbit ECHA				
Evalu	uation/classification	Based on available data, tl	he classification crite	eria are not met.		

Acut	Acute inhalational toxicity			
No	Substance name	CAS no.		EC no.
1	acetone	67-64-1		200-662-2
LC50			76	mg/l
Dura	tion of exposure		4	h
State	of aggregation	Vapour		
Spec	ies	rat		
Sour	ce	ECHA		
Eval	uation/classification	Based on available data, the cl	assification crite	eria are not met.

		•	
Skin	corrosion/irritation		
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Dura	tion of exposure	4	h
Spec	ties	rabbit	
Meth	od	OECD 404	
Sour	ce	ECHA / Read across	
Eval	uation	non-irritant	
2	ethyl-acetate	141-78-6	205-500-4
Spec	ties	rabbit	
Meth	od	OECD 404	
Sour	ce	ECHA	
Eval	uation	low-irritant	
Eval	uation/classification	Based on available data, the classification	on criteria are not met.
3	acetone	67-64-1	200-662-2
Spec	ies	guinea pig	
Sour	ce	ECHA	
Eval	uation	non-irritant	
Eval	uation/classification	Based on available data, the classification	on criteria are not met.

Serie	Serious eye damage/irritation				
No	Substance name	CAS r	io. EC	no.	
1	butanone	78-93	-3 20 ⁻	1-159-0	
Spec	ies	rabbit			
Meth	od	OECD 405			
Sour	ce	ECHA			
Eval	uation	irritant			
2	ethyl-acetate	141-7	8-6 20:	5-500-4	
Spec	ies	rabbit			
Meth	od	OECD 405			
Sour	ce	ECHA			
OGGI					
	uation	low-irritant			
	acetone	low-irritant 67-64	-1 20	0-662-2	



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Method	OECD 405
Source	ECHA
Evaluation	irritant
Evaluation/classification	Based on available data, the classification criteria are met.

Resp	Respiratory or skin sensitisation				
No	Substance name		CAS no.	EC no.	
1	butanone		78-93-3	201-159-0	
Route	e of exposure	Skin			
Spec		guinea pig			
Meth	od	OECD 406			
Sour	ce	ECHA			
Evalu	ıation	non-sensitizing			
2	ethyl-acetate		141-78-6	205-500-4	
Route	e of exposure	Skin			
Spec	ies	guinea pig			
Meth	od	OECD 406			
Sour	ce	ECHA			
Evalu	ıation	non-sensitizing			
3	acetone		67-64-1	200-662-2	
Route	e of exposure	Skin			
Spec	ies	guinea pig			
Sour	ce	ECHA			
Evalu	uation	non-sensitizing			
Evalu	uation/classification	Based on availa	able data, the cla	ssification criteria are not met.	

No Substance name CAS no. EC no. 1 butanone 78-93-3 201-159-	
1 butanone 78-93-3 201-159	
10000	
	-0
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	t 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	t 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	t met.
Type of examination In vivo mammalian somatic cell study: cytogenicity / eryth	nrocyte micronucleus
Species mouse	-
Method OECD 474	
Source ECHA	
Evaluation/classification Based on available data, the classification criteria are not	t met.
2 acetone 67-64-1 200-662	-2
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	t 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	t 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	t met.

Repr	Reproduction toxicity			
No	Substance name	CAS no.	EC no.	
1	butanone	78-93-3	201-159-0	
Rout	e of exposure	inhalational		



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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.
2 acetone	67-64-1 200-662-2
Route of exposure	inhalational
NOAEC	2200 ppm
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.

Carc	Carcinogenicity				
No	Substance name	CAS no.	EC no.		
1	butanone	78-93-3	201-159-0		
Sour	ce	ECHA			
Eval	uation/classification	Based on available data, the classific	cation criteria are not met.		
2	acetone	67-64-1	200-662-2		
Rout	e of exposure	dermal			
Туре	of examination	Toxicity study			
Spec	cies	mouse			
Sour	ce	ECHA			
Eval	uation/classification	Based on available data, the classific	cation criteria are not met.		

STO	Γ - single exposure		
No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
Rout	e of exposure	inhalational	
NOE	C	350	ppm
Spec	ies	rat	
Sour	ce	ECHA	
Effec	ts	May cause drowsiness or dizziness.	
Evalu	uation/classification	Based on available data, the classification crite	eria are met.

STO	TOT - repeated exposure		
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Rout	e of exposure	inhalational	
Spec	ies	rat	
Meth	od	OECD 413	
Sour	ce	ECHA	
Evalu	uation/classification	Based on available data, the classification crite	eria are not met.
2	acetone	67-64-1	200-662-2
Rout	e of exposure	oral	
NOA	EL	10000	ppm
Spec	ies	rat	
Meth	od	OECD 408	
Sour	ce	ECHA	
Evalu	uation/classification	Based on available data, the classification crite	eria are not met.
Rout	e of exposure	inhalational	
NOA	EC	19000	ppm
Spec	ies	rat	
Sour	ce	ECHA	
Evalu	uation/classification	Based on available data, the classification crite	eria are not met.

I	Aspiration hazard
Į	No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure Inhalation of the vapours causes irritation of the respiratory tract and mucous membrane, headaches, nausea, giddiners, vomiting.

11.2 Information on other hazards

Endocrine disrupting properties

No data available.

Other information

No data available.

SECTION 12: Ecological information

Trade name: ArmaFlex RS850

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12.1 Toxicity

Toxi	oxicity to fish (acute)					
No	Substance name	CAS no.		EC no.		
1	butanone	78-93-3		201-159-0		
LC50			2973	mg/l		
Dura	tion of exposure		96	h		
Spec	cies	Pimephales promelas				
Meth	od	OECD 203				
Sour	ce	ECHA				
2	ethyl-acetate	141-78-6		205-500-4		
LC50			220	mg/l		
Dura	tion of exposure		96	h		
Spec	cies	Pimephales promelas				
Sour	ce	ECHA				
3	acetone	67-64-1		200-662-2		
LC50			5540	mg/l		
Dura	tion of exposure		96	h		
Spec	cies	Oncorhynchus mykiss				
Sour	ce	ECHA				
Eval	uation/classification	Based on available data, the	classification of	riteria are not met.		

Toxicity to fish (chronic)	
No data available	

Toxio	Toxicity to Daphnia (acute)					
No	Substance name	CAS no.		EC no.		
1	butanone	78-93-3		201-159-0		
EC50			308	mg/l		
Dura	tion of exposure		48	h		
Spec	ies	Daphnia magna				
Meth	od	OECD 202				
Sour	ce	ECHA				
2	ethyl-acetate	141-78-6		205-500-4		
EC50			3090	mg/l		
Dura	tion of exposure		24	h		
Spec	ies	Daphnia magna				
Sour	ce	ECHA				
3	acetone	67-64-1		200-662-2		
EC50			8800	mg/l		
Dura	tion of exposure		48	h		
Spec	ies	Daphnia pulex				
Sour	ce	ECHA				
Evalu	uation/classification	Based on available data, the	classification crite	eria are not met.		

Toxicity to Daphnia (chronic)					
No	Substance name	CAS no.		EC no.	
1	ethyl-acetate	141-78-6		205-500-4	
NOE	С		2.4	mg/l	
Species		Daphnia magna		•	
·		OECD 211			

Toxic	Toxicity to algae (acute)					
No	Substance name	CAS no.	CAS no.			
1	butanone	78-93-3		201-159-0	159-0	
EC50	0		1220	mg/l		
Dura	tion of exposure		96	h		
Spec	cies	Raphidocelis subcapitata				
Method		OECD 201				
Sour	ce	ECHA				

Toxic	Toxicity to algae (chronic)				
No	Substance name	CAS no.		EC no.	
1	ethyl-acetate	141-78-6		205-500-4	
NOE	C	>	100	mg/l	
Spec	ies	Desmodesmus subspicatus		-	
Method		OECD 201			
Sour	ce	ECHA			

Bacteria toxicity	
No data available	



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12.2 Persistence and degradability

<u>. </u>	ersisterice and degradability			
Biod	legradability			
No	Substance name	CAS no.	EC no.	
1	butanone	78-93-3	201-159-0	
Туре		aerobic biodegradation		
Value	e		98 %	
Dura	ition		28 day(s)	
Meth	nod	OECD 301 D		
Sour	ce	ECHA		
Eval	uation	readily biodegradable		
2	ethyl-acetate	141-78-6	205-500-4	
Туре		COD		
Value	e		1.69 g O2/g	
Sour	ce	ECHA		
Eval	uation	readily biodegradable		
3	acetone	67-64-1	200-662-2	
Туре		aerobic biodegradation		
Value	e		90.9 %	
Dura	ition		28 day(s)	
Meth	od	OECD 301 B	• • •	
Sour	ce	ECHA		
Eval	uation	readily biodegradable		

12.3 Bioaccumulative potential

	2 Diodoumant o potentia						
Parti	tion coefficient n-octanol/water (log value)						
No	Substance name		CAS no.		EC no.		
1	butanone		78-93-3		201-159-0		
log P	ow			0.3			
Refe	rence temperature			40	°C		
Meth		OECD 117					
Sour	ce	ECHA					
2	ethyl-acetate		141-78-6		205-500-4		
log P	ow			0.68			
Refe	rence temperature			25	°C		
Sour	ce	ECHA					
3	acetone		67-64-1		200-662-2		
log P	ow			-0.23			
Meth	od	QSAR					
Sour	ce	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	
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Do not discharge into drains or waters and do not dispose of in public landfills.

Do not discharge product unmonitored into the environment.

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

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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 III
UN number UN1133
Proper shipping name ADHESIVES

Tunnel restriction code E l abel 3

Comments Classification in packing group III according to ADR (chapter 2.2.3.1.4)

14.2 Transport IMDG

Class 3
Packing group III
UN number UN1133
Proper shipping name ADHESIVES
EmS F-E, S-D
Label 3

Comments Classification in packing group III according to IMDG-Code (chapter 2.3.2.2)

14.3 Transport ICAO-TI / IATA

Class 3
Packing group III
UN number UN1133
Proper shipping name Adhesives

Label

Comments Classification in packing group III according to IATA-DGR, chapter 3.3.3.1.1

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

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 regulatio	on (EC) 1907/2006 annex XVII.		No 3, 40		
The	product contains following substance(s) that are conside	ered being subject to REACH r	egulation (E0	C) 1907/2006 annex XVII.		
No	Substance name	CAS no.	EC no.	No		
1	acetone	67-64-1	200-66	2-2 75		
2	butanone	78-93-3	201-15	9-0 75		
3	ethyl-acetate	141-78-6	205-50	0-4 75		
4	methylcyclohexane	108-87-2	203-62	4-3 75		
5	Rosin: colophony	8050-09-7	232-47	5-7 75		

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:	P5c	

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Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)		
VOC content	80.4	%

National regulations

Other regulations

This product is regulated by Regulation (EU) No. 2019/1148: All suspicious transactions, disappearance and theft of significant quantities must be reported to the appropriate national contact point. See https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/crisisand-

terrorism/explosives/explosivesprecursors/docs/list of competent authorities and national contact points en.pdf

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)

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.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Alterations/supplements:

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

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