

Trade name: ArmaFlex Cleaner

Current version: 7.0.0, issued: 29.08.2023 Replaced version: 6.0.0, issued: 23.11.2021 Region: GB

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

#### 1.1 Product identifier

Trade name

### **ArmaFlex Cleaner**

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

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

designed for cleaning surfaces/substrates before applying Armaflex glues and cleaning tools (except Armaflex SF990 and Armaflex Ultima SF990)

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

Deutschland

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 3; H412 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**





Signal word

Danger

Hazardous component(s) to be indicated on label:

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ethyl-acetate

butanone

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

Hazard statement(s)

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Hazard statements (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If skin irritation occurs: Get medical advice/attention.

P391 Collect spillage.

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		Additio	onal infor	mation		
	CAS / EC / Index /	Classification (EC) 1272/2008 (CLP)	Conce	ntration			%
	REACH no						
1	ethyl-acetate						
	141-78-6	EUH066	>=	70.00	- <	90.00	wt%
	205-500-4	Eye Irrit. 2; H319					
	607-022-00-5	Flam. Liq. 2; H225					
	01-2119475103-46	STOT SE 3; H336					
2	butanone						
	78-93-3	Flam. Liq. 2; H225	>=	10.00	- <	25.00	wt%
	201-159-0	Eye Irrit. 2; H319					
	606-002-00-3	STOT SE 3, H336					
	01-2119457290-43	EUH066					
3	Hydrocarbons, C6-C7	', isoalkanes, cyclics, <5% n-hexane					
	64742-49-0	Aquatic Chronic 2; H411	>=	5.00	- <	10.00	wt%
	926-605-8	Asp. Tox. 1; H304					
	-	Flam. Liq. 2; H225					
	01-2119486291-36	STOT SE 3; H336					
		EUH066					

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). Seek medical assistance.

# After ingestion

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Do not induce vomiting. Rinse the mouth thoroughly with water. Never give anything by mouth to an unconscious person. Seek medical advice immediately.

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

#### **Symptoms**

Irritating to eyes, respiratory system and skin. Breathing difficulties; Coughing; Light-headedness; Dizziness; Headache; Nausea; reddening of the skin; blistering

#### 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); Vapours are heavier than air and may spread near ground to sources of ignition. May travel considerable distance to source of ignition and flash back.

#### 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. Ensure adequate ventilation. Use personal protective clothing. Avoid contact with skin, eyes and clothing.

#### For emergency responders

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).

### 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. Do 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. No sparking tools should be used.

#### 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

Substances to be avoided, see section 10.

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# 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/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
2	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			
3	n-hexane	110-54-3		203-777-6	
	2006/15/EC				
	n-Hexane				
	WEL long-term (8-hr TWA reference period)	72	mg/m³	20	ppm
	List of approved workplace exposure limits (WELs) / EH40				
	n-Hexane				
	WEL long-term (8-hr TWA reference period)	72	mg/m³	20	ppm
4	cyclohexane	110-82-7		203-806-2	
	2006/15/EC				
	Cyclohexane				
	WEL long-term (8-hr TWA reference period)	700	mg/m³	200	ppm
	List of approved workplace exposure limits (WELs) / EH40				
	Cyclohexane				
	WEL short-term (15 min reference period)	1050	mg/m³	300	ppm
	WEL long-term (8-hr TWA reference period)	350	mg/m³	100	ppm

# **DNEL, DMEL and PNEC values**

**DNEL** values (worker)

No	Substance name			CAS / EC r	10
	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	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
2	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
3	Hydrocarbons, C6-C7, is	soalkanes, cyclics, <5% n-hexa	ane	64742-49-0	
	_	-		926-605-8	
	dermal	Long term (chronic)	systemic	13964	mg/kg/day
	inhalative	Long term (chronic)	systemic	5306	mg/m³

DNEL value (consumer)

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No	Substance name			CAS / EC n	10
	Route of exposure	Exposure time	Effect	Value	
1	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
2	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
3	Hydrocarbons, C6-C7, iso	alkanes, cyclics, <5% n-hex	ane	64742-49-0 926-605-8	
	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/m³

#### **PNEC values**

No	Substance name		CAS / EC no	
	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			

#### 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 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.

Respirator A-P2

### 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 neoprene
Appropriate Material nitrile rubber

Material thickness > 0.7 mm
Breakthrough time > 60 min

Other

Chemical-resistant work clothes.

## **Environmental exposure controls**

No data available.

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

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

State of aggregation

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liquid					
Form					
liquid					
Colour					
colourless					
Odour					
like solvents					
pH value					
No data available					
Boiling point / boiling range					
Value	appr.	70	°C		
Melting point/freezing point					
No data available					
Decomposition temperature  No data available					
Flash point Value	appr.	-20	°C		
Method	Cleveland clo				
Ignition temperature					
No data available					
Auto-ignition temperature					
Value		274	°C		
Flammability					
No data available					
Lower explosion limit			0/ 1		
Value		1	% vol		
Upper explosion limit Value		12	% vol		
		13	% VOI		
Value	<	1100	hPa		
Reference temperature		50	°C		
Relative vapour density					
No data available					
Relative density					
No data available					
Density					
Value	appr.	0.9	g/cm³		
Reference temperature		20	°C		
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			0.68	°C	
Reference temperature Source	ECHA		25	°C	
2 butanone		78-93-3		201-159-0	
log Pow			0.3	*0	
Reference temperature Method	OECD 117		40	°C	
	ECHA				
Source	LOI 1/ (				
	LOTIV				
Kinematic viscosity Value	<	21	mm²/s		
Kinematic viscosity		21 40	mm²/s °C		
Kinematic viscosity Value					

# 9.2 Other information

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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

None known

#### 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	0	>	5600	mg/kg bodyweight	
Spec	cies	rat			
Sour	ce	ECHA			
2	butanone	78-93-3		201-159-0	
LD50	0		2054	mg/kg bodyweight	
Spec	cies	rat			
Meth	nod	OECD 423			
Sour	ce	ECHA / Read across			

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	ies	rabbit			
Sour	ce	ECHA			

# Acute inhalational toxicity No data available

Skin corrosion/irritation					
No Substance name	CAS no.	EC no.			
1 ethyl-acetate	141-78-6	205-500-4			
Species	rabbit				
Method	OECD 404				
Source	ECHA				
Evaluation	low-irritant				
Evaluation/classification	Based on available data, the classifica	tion criteria are not met.			
2 butanone	78-93-3	201-159-0			
Duration of exposure	4	h			
Species	rabbit				
Method	OECD 404				
Source	ECHA / Read across				
Evaluation	non-irritant				
3 Hydrocarbons, C6-C7, isoalkanes, cyclics, <5	% n-hexane 64742-49-0	926-605-8			
Species	rabbit				
Method	OECD 404				
Source	ECHA				
Evaluation	non-irritant				
Evaluation/classification	Based on available data, the classifica	tion criteria are not met.			

Seri	ous eye damage/irritation			
No	Substance name	CAS no.	EC no.	

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1	ethyl-acetate	141-78-6	205-500-4
Spec	cies	rabbit	
Meth	nod	OECD 405	
Sour	ce	ECHA	
Evalu	uation	low-irritant	
2	butanone	78-93-3	201-159-0
Spec	cies	rabbit	
Meth	nod	OECD 405	
Sour	rce	ECHA	
Evalu	uation	irritant	

Resp	Respiratory or skin sensitisation					
No	Substance name	CAS no.	EC no.			
1	ethyl-acetate	141-78-6	205-500-4			
Rout	e of exposure	Skin				
Spec		guinea pig				
Meth	od	OECD 406				
Sour	ce	ECHA				
Eval	uation	non-sensitizing				
2	butanone	78-93-3	201-159-0			
Rout	e of exposure	Skin				
Species		guinea pig				
Method		OECD 406				
		ECHA				
Eval	uation	non-sensitizing				

Germ cell	mutagenicity				
No Sub	stance name	CAS no.	EC no.		
1 buta	none	78-93-3	201-159-0		
Type of ex	amination	in vitro gene mutation study in bacteria	1		
Species		Salmonella typhimurium			
Method		OECD 471			
Source		ECHA			
Evaluation	/classification	Based on available data, the classifica	ition criteria are not met.		
Type of ex	amination	In vitro Mammalian Chromosomal Abe	erration Test		
Species		rat			
Method		OECD 473	OECD 473		
Source		ECHA			
Evaluation	/classification	Based on available data, the classifica	tion criteria are not met.		
Type of ex	amination	In vitro mammalian cell gene mutation	In vitro mammalian cell gene mutation test		
Species		Mouse lymphoma cells			
Method		OECD 476			
Source		ECHA			
Evaluation	/classification	Based on available data, the classifica	tion criteria are not met.		
Type of ex	amination	In vivo mammalian somatic cell study:	cytogenicity / erythrocyte micronucleus		
Species		mouse			
Method		OECD 474			
Source		ECHA			
Evaluation	/classification	Based on available data, the classifica	ition criteria are not met.		

Repr	Reproduction toxicity						
No	Substance name	CAS no.	EC no.				
1	butanone	78-93-3	201-159-0				
Rout	e of exposure	inhalational					
Type of examination Prenatal Developmental Toxicity Study							
Spec	ties	rat					
Method		OECD 414					
Source		ECHA					
Evalu	uation/classification	Based on available data, the classification crite	eria are not met.				

Caro	Carcinogenicity						
No	No Substance name CAS no. EC no.						
1	butanone	78-93-3	201-159-0				
Sour	Source ECHA						
Evaluation/classification Based on available data, the classification criteria are not met.			eria are not met.				

STO	STOT - single exposure						
No	Substance name	CAS no.		EC no.			
1	ethyl-acetate	141-78-6		205-500-4			
Rout	e of exposure	inhalational					
NOE	С		350	ppm			

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Species	rat
Source	ECHA
Effects	May cause drowsiness or dizziness.
Evaluation/classification	Based on available data, the classification criteria are met.

STO	STOT - 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					
Source		ECHA					
Evalu	uation/classification	Based on available data, the classification criteria are not met.					

Aspiration hazard	
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**

#### 12.1 Toxicity

<b>-</b> ·						
	Toxicity to fish (acute)					
No	Substance name	CAS no.		EC no.		
1	ethyl-acetate	141-78-6		205-500-4		
LC50			220	mg/l		
Dura	tion of exposure		96	h		
Spec	ies	Pimephales promelas				
Sour	ce	ECHA				
2	butanone	78-93-3		201-159-0		
LC50			2973	mg/l		
Dura	tion of exposure		96	h		
Spec	ies	Pimephales promelas				
Meth	od	OECD 203				
Sour	ce	ECHA				
3	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5°	% n-hexane 64742-49-0		926-605-8		
LL50			12	mg/l		
Dura	tion of exposure		96	h		
Spec	ies	Oncorhynchus mykiss				
Meth	od	OECD 203				
Sour	ce	ECHA				

# Toxicity to fish (chronic)

No data available

Toxic	Toxicity to Daphnia (acute)						
No	Substance name		CAS no.		EC no.		
1	ethyl-acetate		141-78-6		205-500-4		
EC50				3090	mg/l		
Dura	tion of exposure			24	h		
Spec	ies	Daphnia magna	l				
Sour	ce	ECHA					
2	butanone		78-93-3		201-159-0		
EC50				308	mg/l		
Dura	tion of exposure			48	h ¯		
Spec	ies	Daphnia magna	l				
Meth	od	OECD 202					
Sour	ce	ECHA					
3	Hydrocarbons, C6-C7, isoalkanes, cyclics, <50	% n-hexane	64742-49-0		926-605-8		
EL50				3	mg/l		
Dura	tion of exposure			48	h		
Spec	ies	Daphnia magna	l				
Sour	ce	ECHA					
			·-	•	•		

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Toxic	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			
Spec	pies	Daphnia magna		•			
Meth	od	OECD 211					

Toxic	Toxicity to algae (acute)					
No	Substance name	CAS no.		EC no.		
1	butanone	78-93-3		201-159-0		
EC50	)		1220	mg/l		
Dura	tion of exposure		96	h		
Spec	cies	Raphidocelis subcapitata				
Meth	od	OECD 201				
Sour	ce	ECHA				
2	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5	% n-hexane 64742-49-0		926-605-8		
EL50			26	mg/l		
Dura	tion of exposure		72	h		
Spec		Pseudokirchneriella subcapitata				
Meth	od	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	С	>	100	mg/l			
Spec	ties	Desmodesmus subspicatus		_			
Meth	od	OECD 201					
Sour	ce	ECHA					

Bacteria toxicity
No data available

12.2 Persistence and degradability

<u>.                                    </u>	ersisterice and degradability					
Biod	legradability					
No	Substance name		CAS no.		EC no.	
1	ethyl-acetate		141-78-6		205-500-4	
Туре		COD				
Value	e			1.69	g O2/g	
Sour	ce	ECHA				
Eval	uation	readily biodegr	adable			
2	butanone		78-93-3		201-159-0	
Туре		aerobic biodeg	radation			
Value	e			98	%	
Dura	ition			28	day(s)	
Meth	nod	OECD 301 D				
Sour		ECHA				
Eval	uation	readily biodegr				
3	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5°	% n-hexane	64742-49-0		926-605-8	
Type		aerobic biodeg	radation			
Valu	e	81	-	98	%	
Dura	ition			28	day(s)	
Meth	nod	OECD 301 F				
Sour	rce	ECHA				
Eval	uation	readily biodegr	adable			

12.3 Bioaccumulative potential

<u> </u>	o Biodocamalativo potentiai					
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				0.68		
Refe	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

Trade name: ArmaFlex Cleaner

Current version: 7.0.0. issued: 29.08.2023 Replaced version: 6.0.0. issued: 23.11.2021 Region: GB

No data available.

#### Results of PBT and vPvB assessment 12.5

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

#### Other information 12.8

#### Other information

Do not discharge product unmonitored into the environment.

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

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

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**

#### **Transport ADR/RID/ADN** 14.1

Class Classification code F1 Packing group Ш Hazard identification no. 33 UN1993 **UN** number

Proper shipping name FLAMMABLE LIQUID, N.O.S.

Technical name

ethyl-acetate butanone 640D

Special Provision 640 Tunnel restriction code D/E Label

#### 14.2 **Transport IMDG**

Class 3 Packing group UN number UN1993

FLAMMABLE LIQUID, N.O.S. Proper shipping name

Technical name ethyl-acetate butanone EmS F-E, S-E

Label 3

#### Transport ICAO-TI / IATA 14.3

Class 3 Packing group UN number UN1993

Flammable liquid, n.o.s. Proper shipping name

Technical name ethyl-acetate butanone Label

# Other information

No data available.

#### **Environmental hazards**

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

#### 14.6 Special precautions for user

No data available.

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

Current version: 7.0.0, issued: 29.08.2023 Replaced version: 6.0.0, issued: 23.11.2021 Region: GB

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	The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. No 3, 40				
The	The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				
No	Substance name	CAS no.	EC no.	No	
1	butanone	78-93-3	201-15	9-0 75	
2	ethyl-acetate	141-78-6	205-50	0-4 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:	P5b		

Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)				
VOC content	<=900	g/l		
VOC content	100	<u>%</u>		

#### **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 been carried out for one or more of the substances within 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)

H304 May be fatal if swallowed and enters airways.
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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