MAKING A DIFFERENCE AROUND THE WORLD EU safety data sheet

Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

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

 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

email:

Armacell UK Ltd Mars Street OL9 6LY Oldham United Kingdom

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

GHS02



Danger

Hazardous component(s) to be indicated on label: ethyl-acetate



Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Region: GB

Hazard statement(s) H225 H319 H336 H412	Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.
Hazard statements (EU) EUH066	Repeated exposure may cause skin dryness or cracking.
Precautionary statement(s) P210 P332+P313 P337+P313 P391 P501	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Collect spillage. Dispose of contents/container to a facility in accordance with local and national regulations.
Other hererde	

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	lo Substance name Additional information					
NU						0/
	CAS / EC / Index /	Classification (EC) 1272/2008 (CLP)	Concer	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. Lig. 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

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



Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Replaced version: 4.0.0, issued: 27.04.2021

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.

7.3 Specific end use(s)

No data available.

SECTION	8: Exposure	controls/	personal	protection
O L O I I O I I			porooriur	



Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Region: GB

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) CAS / EC no No Substance name Effect Value Route of exposure Exposure time 141-78-6 1 ethyl-acetate 205-500-4 dermal Long term (chronic) mg/kg/day systemic 63 inhalative Short term (acut) systemic 1468 mg/m³ mg/m³ inhalative Long term (chronic) local 734 1468 inhalative Short term (acut) local mg/m³ inhalative Long term (chronic) systemic 734 mg/m³ 2 78-93-3 butanone 201-159-0 dermal Long term (chronic) systemic 1161 mg/kg/day inhalative Long term (chronic) systemic 600.00 mg/m³ Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane 3 64742-49-0 926-605-8 dermal Long term (chronic) mg/kg/day systemic 13964 Long term (chronic) systemic 5306 mg/m³ inhalative

DNEL value (consumer)

No	o Substance name			CAS / EC no	
	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



Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Replaced version: 4.0.0, issued: 27.04.2021

Region: GB

	inhalative	Short term (acut)	systemic	734	mg/m³
	inhalative	Long term (chronic)	local	367	mg/m ³
	inhalative	Short term (acut)	local	734	mg/m ³
	inhalative	Long term (chronic)	systemic	367	mg/m ³
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
3	Hydrocarbons, C6-C7, isoalk	anes, cyclics, <5% n-hexa	ne	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/m ³

PNEC values

No	Substance name		CAS / EC n	0
	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	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	butanone		78-93-3 201-159-0	
	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 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
041-2-2			

Other

Chemical-resistant work clothes.

Environmental exposure controls



MAKING A DIFFERENCE AROUND THE WORLD EU safety data sheet

Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Replaced version: 4.0.0, issued: 27.04.2021

Region: GB

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation				
liquid				
Form/Colour				
liquid				
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		00	80	
Value Method	appr. Cleveland closed o	-20	°C	
	Cleveland closed o	μμ		
Ignition temperature				
No data available				
Auto-ignition temperature				
Value		274	°C	
Flammability				
No data available				
Lower explosion limit				
Value		1	% vol	
Upper explosion limit	•			
Value		13	% vol	
Vapour pressure Value	<	1100	hPa	
Reference temperature		50	°C	
Relative vapour density No data available				
Relative density				
No data available				
Density	I			
Value Reference temperature	appr.	0.9 20	g/cm³ °C	
		20	U	
Solubility				
No data available				
Partition coefficient n-octanol/water (log value)				
No Substance name	C/	AS no.		EC no.
1 ethyl-acetate	14	1-78-6	6.8	205-500-4
Reference temperature			25	°C
Source	ECHA		20	
2 butanone		-93-3		201-159-0
log Pow			0.3	20
Reference temperature Method	0ECD 117		40	C°
Source	OECD 117 ECHA			
	12010			
Viscosity		24	mm ² /2	
Value Reference temperature	<	21 40	mm²/s °C	

nac EU safety data sheet MAKING A DIFFERENCE AROUND THE WORLD

Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Replaced version: 4.0.0, issued: 27.04.2021

Region: GB

Particle characteristics

No data available

9.2 Other 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 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

Acut	te oral toxicity				
No	Substance name		CAS no.		EC no.
1	ethyl-acetate		141-78-6		205-500-4
_D50)	>		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		rat			
Meth	nod	OECD 423			
Sour	ce	ECHA / Read	across		
Acut	te dermal toxicity				
No	Substance name		CAS no.		EC no.
1	ethyl-acetate		141-78-6		205-500-4
LD50	0	>		20000	mg/kg bodyweight
Spec	cies	rabbit			
Sour	ce	ECHA			
Acut	te inhalational toxicity				
	lata available				
Skin	corrosion/irritation				
No	Substance name		CAS no.		EC no.
1	ethyl-acetate		141-78-6		205-500-4
Spec		rabbit			
oper	JIES	Tubbit			
		OECD 404			
Meth	nod				
Sour Eval⊧	nod rce uation	OECD 404			
Sour Eval⊧	nod rce	OECD 404 ECHA low-irritant	able data, the cl	assification cri	eria are not met.
Sour Eval Eval	nod rce uation	OECD 404 ECHA low-irritant	able data, the cl. 78-93-3	assification cri	eria are not met. 201-159-0
Meth Sour Eval Eval 2 Dura	nod rce uation uation/classification butanone ution of exposure	OECD 404 ECHA low-irritant		assification crit	
Meth Sour Eval Eval Eval Dura	nod rce uation uation/classification butanone ution of exposure cies	OECD 404 ECHA low-irritant Based on avai			201-159-0
Meth Sour Eval Eval 2	nod rce uation uation/classification butanone ution of exposure cies	OECD 404 ECHA low-irritant Based on avai	78-93-3		201-159-0
Meth Sour Eval Eval Eval Dura Spec Meth Sour	nod rce uation uation/classification butanone tion of exposure cies nod rce	OECD 404 ECHA low-irritant Based on avai	78-93-3		201-159-0
Meth Sour Eval Eval Eval Dura Spec Meth Sour Eval	nod rce uation uation/classification butanone tion of exposure cies nod rce uation	OECD 404 ECHA low-irritant Based on avai rabbit OECD 404 ECHA / Read non-irritant	78-93-3 across		201-159-0 h
Meth Sour Eval Eval Dura Spec Meth Sour Eval 3	nod rce uation uation/classification butanone tion of exposure cies nod ce uation Hydrocarbons, C6-C7, isoalkanes, cyclics, <5%	OECD 404 ECHA low-irritant Based on avai rabbit OECD 404 ECHA / Read non-irritant % n-hexane	78-93-3		201-159-0
Meth Sour Eval Eval Eval Dura Spec Sour Eval Sour Eval Sour	nod rce uation uation/classification butanone tion of exposure cies nod rce uation Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% cies	OECD 404 ECHA low-irritant Based on avai rabbit OECD 404 ECHA / Read non-irritant 6 n-hexane rabbit	78-93-3 across		201-159-0 h
Meth Sour Eval Eval Dura Spec Meth Sour Eval 3	nod rce uation uation/classification butanone tion of exposure cies nod rce uation Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% cies	OECD 404 ECHA low-irritant Based on avai rabbit OECD 404 ECHA / Read non-irritant 6 n-hexane rabbit OECD 404	78-93-3 across		201-159-0 h
Meth Sour Eval Eval Eval Dura Spec Sour Eval Sour Eval Sour	nod rce uation/classification butanone tion of exposure cies nod rce uation Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% cies nod	OECD 404 ECHA low-irritant Based on avai rabbit OECD 404 ECHA / Read non-irritant 6 n-hexane rabbit	78-93-3 across		201-159-0 h



Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Replaced version: 4.0.0, issued: 27.04.2021

Region: GB

	ous eye damage/irritation	040	EC no
No	Substance name	CAS no.	EC no.
1	ethyl-acetate	141-78-6	205-500-4
	cies	rabbit	
Meth		OECD 405	
Sou		ECHA	
	uation	low-irritant	
2	butanone	78-93-3	201-159-0
	cies	rabbit	
Meth	nod	OECD 405	
Sou	rce	ECHA	
Eval	uation	irritant	
Res	piratory or skin sensitisation		
No	Substance name	CAS no.	EC no.
	ethyl-acetate	141-78-6	205-500-4
Rou	te of exposure	Skin	
Spe	cies	guinea pig	
vietł		ÖECD 406	
Sou	rce	ECHA	
	luation	non-sensitizing	
2	butanone	78-93-3	201-159-0
	te of exposure	Skin	201 100 0
Spe		guinea pig	
Meth		OECD 406	
Sou		ECHA	
_val	uation	non-sensitizing	
Geri	m cell mutagenicity		
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Γγρε	e of examination	in vitro gene mutation study in bacteri	a
	cies	Salmonella typhimurium	
Neth		OECD 471	
Sou		ECHA	
	uation/classification	Based on available data, the classific	ation criteria are not met
	e of examination	In vitro Mammalian Chromosomal Ab	
Spe		rat	
Meth		OECD 473	
Sou		ECHA	
	uation/classification	Based on available data, the classific	
	e of examination	In vitro mammalian cell gene mutation	n test
Spe		Mouse lymphoma cells	
Meth		OECD 476	
Sou	rce	ECHA	
Eval	uation/classification	Based on available data, the classific	ation criteria are not met.
Гуре	e of examination	In vivo mammalian somatic cell studv	: cytogenicity / erythrocyte micronucleus
	cies	mouse	
Meth		OECD 474	
Sou		ECHA	
	uation/classification	Based on available data, the classific	ation criteria are not met
2	Hydrocarbons, C6-C7, isoalkanes, cycl		926-605-8
- Sou		ECHA / Read across	
	uation/classification	Based on available data, the classific	ation criteria are not met
	roduction toxicity	040 ***	FC no.
10	Substance name	CAS no.	EC no.
	butanone	78-93-3	201-159-0
	te of exposure	inhalational	
	e of examination	Prenatal Developmental Toxicity Stud	У
•	cies	rat	
Neth		OECD 414	
Sou	rce	ECHA	
Eval	uation/classification	Based on available data, the classific	ation criteria are not met.
2	Hydrocarbons, C6-C7, isoalkanes, cycl		926-605-8
Sou		ECHA / Read across	
	uation/classification	Based on available data, the classific	ation criteria are not met.
	cinogenicity		
-			
No 1	Substance name butanone	CAS no. 78-93-3	EC no. 201-159-0



Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Replaced version: 4.0.0, issued: 27.04.2021

Region: GB

Sour	ce	ECHA		
Evalı	uation/classification	Based on avai	lable data, the classi	fication criteria are not met.
2	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5%	6 n-hexane	64742-49-0	926-605-8
Sour	ce	ECHA / Read	across	
Eval	Evaluation/classification criteria are not met.			fication criteria are not met.
STO	T - single exposure			
No d	ata available			
STO	T - repeated exposure			
No	Substance name		CAS no.	EC no.
1	butanone		78-93-3	201-159-0
Rout	e of exposure	inhalational		
Spec	cies	rat		
Meth	od	OECD 413		
Sour	ce	ECHA		
Evalu	uation/classification	Based on avai	lable data, the classi	fication criteria are not met.
2	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5%	6 n-hexane	64742-49-0	926-605-8
Sour	ce	ECHA / Read	across	
Evaluation/classification Based on available data, the classification criteria are not met.			fication criteria are not met.	
Aspi	ration hazard			
No d	ata available			
Dala	ved and immediate effects as well as chronic ef	facts from sho	t and long torm ox	nosuro

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

Toxicity to fish (acute)					
No	Substance name		CAS no.		EC no.
1	ethyl-acetate		141-78-6		205-500-4
LC50				230	mg/l
Dura	tion of exposure			96	h
Spec		Pimephales pro	omelas		
Sour		ECHA			
2	butanone		78-93-3		201-159-0
LC50				2993	mg/l
	tion of exposure			96	h
Spec		Pimephales pro	omelas		
Meth		OECD 203			
Sour		ECHA			
3	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5%	n-hexane	64742-49-0		926-605-8
LL50				12	mg/l
	tion of exposure			96	h
Spec		Oncorhynchus	mykiss		
Meth		OECD 203			
Sour	ce	ECHA			
Toxic	city to fish (chronic)				
	ata available				
Toxic	city to Daphnia (acute)				
No	Substance name		CAS no.		EC no.
1	ethyl-acetate	-	141-78-6		205-500-4
EC50				1350	mg/l
	tion of exposure			48	h
Spec		Daphnia magna	a		
Sour		ECHA			
2	butanone		78-93-3		201-159-0
EC50				308	mg/l
	tion of exposure			48	h
Spec		Daphnia magna	3		
Meth	od	OECD 202			



Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Replaced version: 4.0.0, issued: 27.04.2021

Region: GB

Sourc	ce	ECHA				
Toxic	Toxicity to Daphnia (chronic)					
	No data available					
Toxic	Toxicity to algae (acute)					
No	Substance name		CAS no.		EC no.	
1	butanone		78-93-3		201-159-	0
EC50				2029		ng/l
	ion of exposure			96	ł	า
	Species		riella subcapitata			
Metho		OECD 201				
Sourc	ce de la constante de la consta	ECHA				
2	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5%	6 n-hexane	64742-49-0		926-605-8	8
EL50				26	r	mg/l
Durat	ion of exposure			72	ł	า้
Spec	ies	Pseudokirchne	riella subcapitata			
Meth	Method		•			
Source		ECHA				
Toxicity to algae (chronic)						
	No data available					
Bacte	Bacteria toxicity					
No da	No data available					

12.2 Persistence and degradability

BIOO	legradability					
No	Substance name		CAS no.		EC no.	
1	ethyl-acetate		141-78-6		205-500-4	
Sour	ce	ECHA				
Evalu	uation	readily biodegr	adable			
2	butanone		78-93-3		201-159-0	
Туре	1	aerobic biodeg	radation			
Value	9			98	%	
Dura	tion			28	day(s)	
Meth	od	OECD 301 D				
Sour	ce	ECHA				
Evalu	uation	readily biodegr	adable			
3	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5%	n-hexane	64742-49-0		926-605-8	
Туре	1	aerobic biodeg	radation			
Value	e			98	%	
Dura	tion			28	day(s)	
Meth	od	OECD 301 F				
Sour	ce	ECHA				
Evalu	uation	readily degrada	able			

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 F	Pow			6.8		
Refe	rence temperature			25	°C	
Sour	ce	ECHA				
2	butanone		78-93-3		201-159-0	
log F	Pow			0.3		
Reference temperature				40	°C	
Meth	Method					
Sour	Source					

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties No data available.

12.7 Other adverse effects



Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Replaced version: 4.0.0, issued: 27.04.2021

Region: GB

No data available.

12.8 Other information

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

13.1 Waste treatment methods

Product

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

Packaging

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

SECTION 14: Transport information

14.1	Transport ADR/RID/ADN Class Classification code Packing group Hazard identification no. UN number Proper shipping name Technical name Special Provision 640 Tunnel restriction code Label	3 F1 II 33 UN1993 FLAMMABLE LIQUID, N.O.S. ethyl-acetate butanone 640D D/E 3		
14.2	Transport IMDG Class Packing group UN number Proper shipping name Technical name EmS Label	3 II UN1993 FLAMMABLE LIQUID, N.O.S. ethyl-acetate butanone F-E, S-E 3		
14.3	Transport ICAO-TI / IATA Class Packing group UN number Proper shipping name Technical name Label	3 II UN1993 Flammable liquid, n.o.s. ethyl-acetate butanone 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 acco Not relevant	rding to IMO instruments		
SEC	TION 15: Regulatory informati	on		

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU regulations</u>

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.



Trade name: Armaflex Cleaner

Current version : 5.0.0, issued: 06.08.2021

Replaced version: 4.0.0, issued: 27.04.2021

Region: GB

REACH candidate list of substances of very high con	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 Auth	orisation) 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, PL	ACING ON THE MARKET			
AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES					
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. No 3, 40					
Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances					
This product is subject to Part I of Annex I, risk category: P5b					
Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)					
VOC content <=900 g/l					
VOC content 100 %					

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

H411

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

May be fatal if swallowed and enters airways Toxic to aquatic life with long lasting effects.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO GmbH. Prod-ID 636648