

Trade name: Armaflex Cleaner

Current version : 2.1.0, issued: 01.10.2015

Replaced version: 2.0.0, issued: 10.09.2014

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)

**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

### 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

### 2.2 Label elements

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

**Hazard pictograms**



GHS02



GHS07

**Signal word**

Danger

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

ethyl-acetate

**Hazard statements**

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.

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**Precautionary statements**

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 eye irritation persists: Get medical advice/attention.  
 P391 Collect spillage.  
 P501 Dispose of contents/container 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	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	<b>ethyl-acetate</b>		
	141-78-6 205-500-4 607-022-00-5 -	EUH066 Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	> 70.00 - < 90.00 %-b.w.
2	<b>butanone</b>		
	78-93-3 201-159-0 606-002-00-3 -	EUH066 Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	> 10.00 - < 30.00 %-b.w.
3	<b>Hydrocarbons, C6-C7, isoalkanes, cyclics, &lt;5% n-hexane</b>		
	- 926-605-8 - 01-2119486291-36	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Flam. Liq. 2; H225 STOT SE 3; H336	> 5.00 - < 10.00 %-b.w.

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. Change contaminated, saturated clothing.

**After inhalation**

When inhaled remove to fresh air and seek medical aid.

**After skin contact**

When in contact with the skin, clean with soap and water.

**After eye contact**

Remove contact lenses, 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.

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**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

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

**Unsuitable extinguishing media**

High power water jet

**5.2 Special hazards arising from the substance or mixture**In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO<sub>2</sub>)**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 picked up, treat material as prescribed under 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 of working 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.

**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.

**Requirements for storage rooms and vessels**

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

**Advice on storage assembly**

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

**7.3 Specific end use(s)**

No data available.

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## 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
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Ethyl acetate			
	STEL		400 ml/m <sup>3</sup>
	TWA		200 ml/m <sup>3</sup>
2	butanone	78-93-3	201-159-0
<b>2000/39/EWG</b>			
Butanone			
	STEL	900 mg/m <sup>3</sup>	300 ml/m <sup>3</sup>
	TWA	600 mg/m <sup>3</sup>	200 ml/m <sup>3</sup>
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Butan-2-one			
	STEL	899 mg/m <sup>3</sup>	300 ml/m <sup>3</sup>
	TWA	600 mg/m <sup>3</sup>	200 ml/m <sup>3</sup>
	Skin resorption / sensibilisation	Sk	
3	n-hexane	110-54-3	203-777-6
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
n-Hexane			
	TWA	72 mg/m <sup>3</sup>	20 ml/m <sup>3</sup>
<b>2006/15/EG</b>			
n-Hexane			
	TWA	72 mg/m <sup>3</sup>	20 ml/m <sup>3</sup>
4	cyclohexane	110-82-7	203-806-2
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Cyclohexane			
	STEL	1050 mg/m <sup>3</sup>	300 ml/m <sup>3</sup>
	TWA	350 mg/m <sup>3</sup>	100 ml/m <sup>3</sup>
<b>2006/15/EG</b>			
Cyclohexan			
	TWA	700 mg/m <sup>3</sup>	200 ml/m <sup>3</sup>

#### DNEL and PNEC values

##### DNEL values (worker)

No	Substance name	CAS / EC no		
	Route of exposure	Exposure time	Effect	Value
1	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane			-
	dermal	Long term (chronic)	systemic	773 mg/kg/day
	inhalative	Long term (chronic)	systemic	2035 mg/m <sup>3</sup>

##### DNEL value (consumer)

No	Substance name	CAS / EC no		
	Route of exposure	Exposure time	Effect	Value
1	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane			-
	oral	Long term (chronic)	systemic	699 mg/kg/day
	dermal	Long term (chronic)	systemic	699 mg/kg/day
	inhalative	Long term (chronic)	systemic	603 mg/m <sup>3</sup>

### 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.

Respirator

A-P2

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**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  
 Appropriate Material                      PVA

**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**

<b>Form/Colour</b>			
liquid			
clear			
<b>Odour</b>			
of solvents			
<b>Odour threshold</b>			
No data available			
<b>pH value</b>			
No data available			
<b>Boiling point / boiling range</b>			
Value	appr.	70	°C
<b>Melting point / melting range</b>			
No data available			
<b>Decomposition point / decomposition range</b>			
No data available			
<b>Flash point</b>			
Value	appr.	-20	°C
<b>Auto-ignition temperature</b>			
No data available			
<b>Oxidising properties</b>			
No data available			
<b>Explosive properties</b>			
No data available			
<b>Flammability (solid, gas)</b>			
No data available			
<b>Lower flammability or explosive limits</b>			
Value		1	% vol
<b>Upper flammability or explosive limits</b>			
Value		13	% vol

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<b>Vapour pressure</b>			
No data available			
<b>Vapour density</b>			
No data available			
<b>Evaporation rate</b>			
No data available			
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value	appr.	0.9	g/cm <sup>3</sup>
Reference temperature		20	°C
<b>Solubility in water</b>			
No data available			
<b>Solubility(ies)</b>			
No data available			
<b>Partition coefficient: n-octanol/water</b>			
No data available			
<b>Viscosity</b>			
No data available			

## 9.2 Other information

<b>Other information</b>
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, if handled according to order.

### 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.

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**SECTION 11: Toxicological information**
**11.1 Information on toxicological effects**

<b>Acute oral toxicity</b>
No data available
<b>Acute dermal toxicity</b>
No data available
<b>Acute inhalational toxicity</b>
No data available
<b>Skin corrosion/irritation</b>
No data available
<b>Serious eye damage/irritation</b>
No data available
<b>Respiratory or skin sensitisation</b>
No data available
<b>Germ cell mutagenicity</b>
No data available
<b>Reproduction toxicity</b>
No data available
<b>Carcinogenicity</b>
No data available
<b>STOT-single exposure</b>
No data available
<b>STOT-repeated exposure</b>
No data available
<b>Aspiration hazard</b>
No data available
<b>Delayed and immediate effects as well as chronic effects from short and long-term exposure</b>
Inhalation of the vapours causes irritation of the respiratory tract and mucous membrane, headaches, nausea, giddiners, vomiting.

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**SECTION 12: Ecological information**
**12.1 Toxicity**

<b>Toxicity to fish (acute)</b>
No data available
<b>Toxicity to fish (chronic)</b>
No data available
<b>Toxicity to Daphnia (acute)</b>
No data available
<b>Toxicity to Daphnia (chronic)</b>
No data available
<b>Toxicity to algae (acute)</b>
No data available
<b>Toxicity to algae (chronic)</b>
No data available
<b>Bacteria toxicity</b>
No data available

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

<b>Results of PBT and vPvB assessment</b>	
PBT assessment	No data available.
vPvB assessment	No data available.

**12.6 Other adverse effects**

No data available.

**12.7 Other information**

<b>Other information</b>
Do not discharge product unmonitored into the environment.
Do not discharge into the drains or waters and do not store on public depositories.

**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**

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

**SECTION 14: Transport information**
**14.1 Transport ADR/RID/ADN**

Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1993
Technical name	FLAMMABLE LIQUID, N.O.S.
Danger releasing substance	ethyl-acetate butanone
Special Provision 640	640D
Tunnel restriction code	D/E
Label	3



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## 14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Danger releasing substance	ethyl-acetate butanone
EmS	F-E+S-E
Label	3

## 14.3 Transport ICAO-TI / IATA

Class	3
Packing group	II
UN number	UN1993
Proper shipping name	Flammable liquid, n.o.s.
Danger releasing substance	ethyl-acetate butanone
Label	3

## 14.4 Other information

No data available.

## 14.5 Environmental hazards

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

## 14.6 Special precautions for user

No data available.

## 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

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, PREPARATIONS AND ARTICLES**

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3, 40
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##### **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
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### 15.2 Chemical safety assessment

No data available.

## SECTION 16: Other information

### Further information

Authors responsible for the compilation of the material safety data sheet: UMCO Umwelt Consult GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 183, Tel.: +49(40)79 02 36 300, Fax: +49(40)79 02 36 357, 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.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

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 chapter.

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**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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