Trade name: Armaflex 525

Current version : 3.0.0, issued: 27.04.2021 **Replaced version:** 2.0.0, issued: 28.01.2021 **Region:** GB

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

1.1 Product identifier

Trade name

Armaflex 525

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

Relevant identified uses of the substance or mixture
Adhesive for processing all flexible Armaflex insulation materials (except Armaflex Ultima)

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
Armacell GmbH
Robert-Bosch-Straße 10
48153 Münster

Telephone no.	+49 (0) 251 - 7603-200
Fax no.	+49 (0) 251 - 7603-561
e-mail	info.de@armacell.com

Information provided by / telephone
Dr. Heribert Quante, Tel.: +49 (0) 251 - 7603-227

Advice on Safety Data Sheet
heribert.quante@armacell.com

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aquatic Chronic 2; H411
Eye Irrit. 2; H319
Flam. Liq. 2; H225
Skin Irrit. 2; H315
STOT SE 3; H336

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms


GHS02


GHS07


GHS09

Signal word
Danger

Hazardous component(s) to be indicated on label:
ethyl-acetate
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
butanone
Hydrocarbons, C6, isoalkanes, <5% n-hexane

Hazard statement(s)

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

H411	Toxic to aquatic life with long lasting effects.
Hazard statements (EU)	
EUH208	Contains Colophony. May produce an allergic reaction.
Precautionary statement(s)	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

Vapours can form an explosive mixture with air.

PBT assessment
No data available.

vPvB assessment
No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**ethyl-acetate**			
	141-78-6 205-500-4 607-022-00-5 01-2119475103-46	EUH066 Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	>= 25.00 - < 50.00	wt%
2	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**			
	64742-49-0 921-024-6 - 01-2119475514-35	Aquatic Chronic 2; H411 Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Asp. Tox. 1; H304	>= 10.00 - < 25.00	wt%
3	**butanone**			
	78-93-3 201-159-0 606-002-00-3 01-2119457290-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	>= 10.00 - < 25.00	wt%
4	**Hydrocarbons, C6, isoalkanes, <5% n-hexane**			
	64742-49-0 931-254-9 - 01-2119484651-34	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	>= 5.00 - < 10.00	wt%
5	**Colophony**			
	8050-09-7 232-475-7 650-015-00-7 -	Skin Sens. 1; H317	< 1.00	wt%
6	**zinc oxide**			
	1314-13-2 215-222-5 030-013-00-7 -	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 1.00	wt%

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly

before reusing.

After inhalation
When inhaled remove to fresh air and seek medical aid.

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

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

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

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray jet; Carbon dioxide; Dry chemical extinguisher; Foam

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); Hydrogen chloride (HCl)

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Do not keep the container sealed.

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Provide good ventilation at the work area (local exhaust ventilation, if necessary). Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Do not inhale vapours. Avoid contact with eyes and skin.

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

7.2 Conditions for safe storage, including any incompatibilities

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

Recommended storage temperature

Value	15	-	30	°C

Storage stability

Value	max.	18	months

Requirements for storage rooms and vessels
Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Appropriate Material	stainless steel

Incompatible products
Do not store together with: oxidizing agents

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	**ethyl-acetate**	**141-78-6**		**205-500-4**	
	2017/164/EU				
	Ethyl acetate				
	WEL short-term (15 min reference period)	1468	mg/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			

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**ethyl-acetate**			**141-78-6 205-500-4**	
	dermal	Long term (chronic)	systemic	63	mg/kg/day
	inhalative	Short term (acut)	systemic	1468	mg/m³
	inhalative	Long term (chronic)	local	734	mg/m³
	inhalative	Short term (acut)	local	1468	mg/m³
	inhalative	Long term (chronic)	systemic	734	mg/m³
2	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**			**64742-49-0 921-024-6**	
	dermal	Long term (chronic)	systemic	773	mg/kg/day
	inhalative	Long term (chronic)	systemic	2035	mg/m³
3	**butanone**			**78-93-3 201-159-0**	
	dermal	Long term (chronic)	systemic	1161	mg/kg/day
	inhalative	Long term (chronic)	systemic	600.00	mg/m³
4	**Hydrocarbons, C6, isoalkanes, <5% n-hexane**			**64742-49-0 931-254-9**	
	dermal	Long term (chronic)	systemic	13964	mg/kg/day
	inhalative	Long term (chronic)	systemic	5306	mg/m³

DNEL value (consumer)

No	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
	inhalative	Short term (acut)	systemic	734	mg/m³
	inhalative	Long term (chronic)	local	367	mg/m³
	inhalative	Short term (acut)	local	734	mg/m³
	inhalative	Long term (chronic)	systemic	367	mg/m³
2	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**			**64742-49-0 921-024-6**	
	oral	Long term (chronic)	systemic	699	mg/kg/day
	dermal	Long term (chronic)	systemic	699	mg/kg/day
	inhalative	Long term (chronic)	systemic	608	mg/m³
3	**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
4	**Hydrocarbons, C6, isoalkanes, <5% n-hexane**			**64742-49-0 931-254-9**	
	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	Type	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 aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.
Respirator A2/P2

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with

the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.
Appropriate Material nitrile

Other
Chemical-resistant work clothes. Fire-resistant antistatic protective clothing.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form/Colour
liquid
colourless

Odour
like solvents

pH value
No data available

Boiling point / boiling range			
Value		56	°C
Reference substance	Naphtha		

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point			
Value		-26	°C
Reference substance	Naphtha		

Ignition temperature
No data available

Flammability
No data available

Lower explosion limit			
Value		1	% vol
Reference substance	Naphtha		

Upper explosion limit			
Value		12.8	% vol
Reference substance	Ethyl acetate		

Vapour pressure			
Value		21	kPa
Reference temperature		20	°C
Reference substance	Naphtha		

Relative vapour density
No data available

Relative density
No data available

Density			
Value	appr.	0.84	g/cm³
Reference temperature		20	°C

Solubility in water	
Comments	immiscible

Solubility
No data available

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**

1	ethyl-acetate	141-78-6	205-500-4
log Pow		6.8	
Reference temperature		25	°C
Source	ECHA		
2	butanone	78-93-3	201-159-0
log Pow		0.3	
Reference temperature		40	°C
Method	OECD 117		
Source	ECHA		

Viscosity			
Value	appr.	450	mPa*s
Reference temperature		20	°C
Type	dynamic		

Solvent content			
Value	appr.	82	%

Solids content			
Value	appr.	18	%

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
Protect from heat and direct sunlight.

10.5 Incompatible materials
strong oxidizing agents

10.6 Hazardous decomposition products
None, if handled according to intended use.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity				
No	Substance name	CAS no.	EC no.	
1	ethyl-acetate	141-78-6	205-500-4	
LD50	>	5600		mg/kg bodyweight
Species	rat			
Source	ECHA			
2	butanone	78-93-3	201-159-0	
LD50		2054		mg/kg bodyweight
Species	rat			
Method	OECD 423			
Source	ECHA / Read across			
3	Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-0	931-254-9	
LD50		16750		mg/kg bodyweight
Species	rat			
Method	OECD 401			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
4	zinc oxide	1314-13-2	215-222-5	
LD50	>	5000		mg/kg bodyweight
Species	rat			
Method	OECD 401			

Source	ECHA

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

Acute inhalational toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**		**921-024-6**
LC50	>	25.2		mg/l
Duration of exposure		4		h
State of aggregation	Vapour			
Species	rat			
Source	ECHA			
2	**Hydrocarbons, C6, isoalkanes, <5% n-hexane**	**64742-49-0**		**931-254-9**
LC50		259.3		mg/l
Duration of exposure		4		h
State of aggregation	Vapour			
Species	rat			
Method	OECD 403			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			

Skin corrosion/irritation				
No	**Substance name**	**CAS no.**		**EC no.**
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 classification criteria are not met.			
2	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**		**921-024-6**
Species	rabbit			
Method	OECD 404			
Source	ECHA			
Evaluation	irritant			
3	**butanone**	**78-93-3**		**201-159-0**
Duration of exposure		4		h
Species	rabbit			
Method	OECD 404			
Source	ECHA / Read across			
Evaluation	non-irritant			

Serious eye damage/irritation				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethyl-acetate**	**141-78-6**		**205-500-4**
Species	rabbit			
Method	OECD 405			
Source	ECHA			
Evaluation	low-irritant			
2	**butanone**	**78-93-3**		**201-159-0**
Species	rabbit			
Method	OECD 405			
Source	ECHA			
Evaluation	irritant			
3	**Hydrocarbons, C6, isoalkanes, <5% n-hexane**	**64742-49-0**		**931-254-9**
Duration of exposure		72		h
Species	rabbit			
Method	OECD 405			
Source	ECHA			

Evaluation	non-irritant
Evaluation/classification	Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethyl-acetate**	**141-78-6**	**205-500-4**
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		
2	**butanone**	**78-93-3**	**201-159-0**
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		
3	**Hydrocarbons, C6, isoalkanes, <5% n-hexane**	**64742-49-0**	**931-254-9**
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**butanone**	**78-93-3**	**201-159-0**
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 met.		
Type of examination	In vitro Mammalian Chromosomal Aberration Test		
Species	rat		
Method	OECD 473		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	In vitro mammalian cell gene mutation test		
Species	Mouse lymphoma cells		
Method	OECD 476		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	In vivo mammalian somatic cell study: cytogenicity / erythrocyte micronucleus		
Species	mouse		
Method	OECD 474		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	**Hydrocarbons, C6, isoalkanes, <5% n-hexane**	**64742-49-0**	**931-254-9**
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**butanone**	**78-93-3**	**201-159-0**
Route of exposure	inhalational		
Type of examination	Prenatal Developmental Toxicity Study		
Species	rat		
Method	OECD 414		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	**Hydrocarbons, C6, isoalkanes, <5% n-hexane**	**64742-49-0**	**931-254-9**
Route of exposure	inhalational		
NOAEC	9000	ppm	
Duration of exposure	13	week/s	
Type of examination	2 generation study		
Species	rat		
Method	OECD 416		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

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

STOT - single exposure
No data available

STOT - repeated exposure				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**		**921-024-6**
Route of exposure		inhalational		
NOAEC		14000		mg/m³
Species		rat		
Source		ECHA		
2	**butanone**	**78-93-3**		**201-159-0**
Route of exposure		inhalational		
Species		rat		
Method		OECD 413		
Source		ECHA		
Evaluation/classification		Based on available data, the classification criteria are not met.		
3	**Hydrocarbons, C6, isoalkanes, <5% n-hexane**	**64742-49-0**		**931-254-9**
Route of exposure		inhalational		
Source		ECHA		
Evaluation/classification		Based on available data, the classification criteria are not met.		

Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethyl-acetate**	**141-78-6**		**205-500-4**
LC50		230		mg/l
Duration of exposure		96		h
Species		Pimephales promelas		
Source		ECHA		
2	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**		**921-024-6**
LC50		11.4		mg/l
Duration of exposure		96		h
Species		Oncorhynchus mykiss		
Method		OECD 203		
Source		ECHA		
3	**butanone**	**78-93-3**		**201-159-0**
LC50		2993		mg/l
Duration of exposure		96		h
Species		Pimephales promelas		
Method		OECD 203		
Source		ECHA		

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethyl-acetate**	**141-78-6**	**205-500-4**
EC50		1350	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Source	ECHA		
2	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**	**921-024-6**
EL50		3	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		
3	**butanone**	**78-93-3**	**201-159-0**
EC50		308	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)
No data available

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

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability

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

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**

1	ethyl-acetate	141-78-6	205-500-4
log Pow		6.8	
Reference temperature		25	°C
Source		ECHA	
2	butanone	78-93-3	201-159-0
log Pow		0.3	
Reference temperature		40	°C
Method		OECD 117	
Source		ECHA	

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.
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	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1133
Proper shipping name	ADHESIVES
Special Provision 640	640D
Tunnel restriction code	D/E
Label	3
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1133
Proper shipping name	ADHESIVES
Technical name	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
EmS	F-E, S-D
Label	3
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	3
Packing group	II
UN number	UN1133
Proper shipping name	Adhesives
Label	3

14.4 Other information
No data available.

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

14.6 Special precautions for user
No data available.

14.7 Maritime transport in bulk according to IMO instruments
Not relevant

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

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 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:	E2, P5b
If the properties of the substance/product give rise to more than one classification, for the purposes of 2012/18/UE, the lowest qualifying quantities set out in Part 1 and Part 2 of Annex I shall apply.	

Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)	
VOC content	82 %

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

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

SECTION 16: Other information

Further information
Authors responsible for the compilation of the material safety data sheet: UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de.
The information is based on our current knowledge however it does not represent a guarantee of product properties nor does it create any legal obligation.

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

EUH066	Repeated exposure may cause skin dryness or cracking.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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

Prod-ID 771968