

Trade name: Armaflex HT625

Current version : 1.0.1, issued: 10.09.2020

Replaced version: 1.0.0, issued: 10.09.2020

Region: USA

SECTION 1: Identification

1.1 Product identifier

Trade name

Armaflex HT625

1.2 Recommended use of the chemical and restrictions on use

Recommended use of the chemical and restrictions on use

Adhesive for processing all flexible Armaflex insulation materials (except Armaflex Ultima)

Restrictions on use

No data available.

1.3 Details of the supplier of the safety data sheet

Address

Armacell LLC

55 Vilcom Center Drive

Suite 200

Chapel Hill, NC

27514

Telephone no.

+1 800 866 8638

e-mail

Kartik.a.patel@armacell.com

1.4 Emergency phone number

Armacell LLC

+1 919 304 3846

SECTION 2: Hazard(s) identification

2.1 Classification of the chemical

Classification of the chemical in accordance with paragraph (d) of 29 CFR § 1910.1200 "Hazard Communication"

Eye Irritation - Category 2A

Flammable Liquids - Category 2

Skin Corrosion / Irritation - Category 2

Skin sensitization - Category 1

Specific Target Organ Toxicity - Single Exposure - narcotic effects - Category 3

Classification of the chemical with regard to hazards for the aquatic environment in accordance with the UN GHS criteria relevant for dangerous goods transport classification

Aquatic Chronic - Category 2

2.2 Label elements

Pictogram(s)



Signal word

Danger

Hazard Statement(s)

Physical hazards

Highly flammable liquid and vapor

Health hazards

Causes skin irritation

May cause an allergic skin reaction

Causes serious eye irritation

May cause drowsiness or dizziness

Precautionary Statement(s)

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment

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Response	<p>Use explosion-proof electrical/ventilating/ lighting/equipment. Use non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. Specific treatment (see first aid instruction on this label). If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. In case of fire: Use carbon dioxide (CO₂), alcohol resistant foam, extinguishing powder, water mist to extinguish.</p>
Storage	<p>Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.</p>
Disposal	<p>Dispose of contents/container to a facility in accordance with local and national regulations.</p>

2.3 Labelling information

No data available

2.4 Hazards not otherwise classified (HNOC)

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	Concentration	%
	CAS no.		
1	ethyl acetate		
	141-78-6	>= 25.00 - < 50.00	%-b.w.
2	Naphtha (petroleum), hydrotreated light		
	64742-49-0	>= 25.00 - < 50.00	%-b.w.
3	butanone		
	78-93-3	>= 10.00 - < 25.00	%-b.w.
4	zinc oxide		
	1314-13-2	< 2.50	%-b.w.
5	rosin		
	8050-09-7	< 2.50	%-b.w.

3.3 Other information

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of 29 CFR 1910.1200

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

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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 lens. 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 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: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

Full water jet

5.2 Specific hazards arising from the chemical

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

5.3 Special protective equipment and precautions for fire-fighters

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 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in suitable container for disposal. Do not keep the container sealed.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Risks inherent to handling the product must be minimised by applying 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.

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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. Vapors 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 resealed 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

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limit(s)

No	Substance name	CAS no.
1	ethyl acetate	141-78-6
ACGIH Threshold Limit Values		
Ethyl acetate		
	TWA	400 ppm
OSHA Permissible Exposure Limits (PELS)		
Ethyl acetate		
	TWA	1400 mg/m ³ 400 ppm
2	butanone	78-93-3
ACGIH Threshold Limit Values		
Methyl ethyl ketone		
	STEL	300 ppm
	TWA	200 ppm
	Remarks	BEI
OSHA Permissible Exposure Limits (PELS)		
2-Butanone		
	TWA	590 mg/m ³ 200 ppm

8.2 Exposure controls

Appropriate engineering controls

Provide good ventilation of working area (local exhaust ventilation if necessary).

Individual protection measures, such as 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

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No data available.

Hand protection

Sufficient protection is given wearing suitable protective gloves in the event of risk of skin contact with the product. Before use, the protective glove 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 protection measures

Chemical-resistant work clothes. fire-resistant antistatic protective clothing

SECTION 9: Physical and chemical properties

Form/Color		
liquid		
colorless		
Odor		
of solvents		
Odor threshold		
No data available		
pH value		
No data available		
Boiling point / boiling range		
Value	56	°C
Reference substance	Naphtha	
Melting point / melting range		
No data available		
Decomposition point / decomposition range		
No data available		
Flash point		
Value	-26	°C
Reference substance	Naphtha	
Auto-ignition temperature		
No data available		
Oxidising properties		
No data available		
Explosive properties		
No data available		
Flammability (solid, gas)		
No data available		
Lower flammability or explosive limits		
Value	1	% vol
Reference substance	Naphtha	
Upper flammability or explosive limits		
Value	12.8	% vol
Reference substance	Ethyl acetate	
Vapor pressure		
Value	21	kPa
Reference temperature	20	°C
Reference substance	Naphtha	

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Vapor density
No data available

Evaporation rate
No data available

Relative density
No data available

Density			
Value	appr.	0.84	g/cm ³
Reference temperature		20	°C

Solubility in water	
Remarks	immiscible

Solubility(ies)
No data available

Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	ethyl acetate	141-78-6	
log Pow		0.68	
Reference temperature		25	°C
Method	EPA OPPTS 830.7560		
Source	ECHA		

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

Solvent content			
Value	appr.	82	%

Solids content			
Value	appr.	18	%

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 oxidising agents

10.6 Hazardous decomposition products

None, if handled according to intended use.

SECTION 11: Toxicological information

Information on toxicological effects

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Acute oral toxicity	
No data available	

Acute dermal toxicity		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
LD50	>	20000 mg/kg bodyweight
Species	rabbit	
Source	ECHA	

Acute inhalational toxicity	
No data available	

Skin corrosion/irritation	
No data available	

Serious eye damage/irritation		
No	Substance name	CAS no.
1	butanone	78-93-3
Method	OECD 405	
Evaluation	Irritating to eyes	
Species	rabbit	
Source	ECHA	

Respiratory or skin sensitisation		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
Route of exposure	Skin	
Species	guinea pig	
Method	OECD 406	
Source	ECHA	
Evaluation	non-sensitizing	

Germ cell mutagenicity		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
Source	ECHA	
Evaluation/classification	Based on available data, the classification criteria are not met.	

Reproduction toxicity		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
Type of examination	Two-Generation Reproduction Toxicity Study	
Species	mouse	
Method	OECD 416	
Source	ECHA	
Evaluation/classification	Based on available data, the classification criteria are not met.	

Carcinogenicity	
No data available	

NTP Report on Carcinogens (RoC)	
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) listed "known" (to be a human carcinogen) or "RAHC" (reasonably anticipated to be a human carcinogen).	

OSHA Standards listing cancer as a health effect (Table VII.6.2)	
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) listed as carcinogenic.	

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans	
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) classified by the IARC Monographs.	

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STOT - single exposure	
No data available	

STOT - repeated exposure		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
Route of exposure		inhalational
NOAEL		1.28 mg/l
Duration of exposure		90 day(s)
Species	rat	
Method	EPA OTS 798.2450	
Source	ECHA	
Evaluation/classification	Based on available data, the classification criteria are not met.	

Aspiration hazard	
No data available	

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
LC50		230 mg/l
Duration of exposure		96 h
Species	Pimelphales promelas	
Method	US EPA E03-05	
Source	ECHA	

Toxicity to fish (chronic)	
No data available	

Toxicity to Daphnia (acute)	
No data available	

Toxicity to Daphnia (chronic)		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
NOEC		2.4 mg/l
Duration of exposure		21 day(s)
Species	Daphnia magna	
Method	OECD 211	
Source	ECHA	

Toxicity to algae (acute)	
No data available	

Toxicity to algae (chronic)		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
NOEC	>	100 mg/l
Duration of exposure		72 h
Species	Desmodesmus subspicatus	
Method	OECD 201	
Source	ECHA	

12.2 Persistence and degradability

Biodegradability		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
Value		69 %
Dauer		20

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Dauer	day(s)
Evaluation	readily biodegradable
Type	aerobic biodegradation
Source	ECHA

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water		
No	Substance name	CAS no.
1	ethyl acetate	141-78-6
log Pow		0.68
Reference temperature		25 °C
Method	EPA OPPTS 830.7560	
Source	ECHA	

12.4 Mobility in soil

No data available.

12.5 Other adverse effects

No data available.

12.6 Other information

Other information
Do not discharge into the drains or waters and do not store on public depositories.

SECTION 13: Disposal considerations

13.1 Disposal considerations

Product

Dispose in accordance with federal, state and local regulations.

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 accordance with federal, state and local regulations.

SECTION 14: Transport information

14.1 US DOT (Department of Transportation)

Transport hazard class	3
Packaging group	II
UN/NA number	UN1133
UN proper shipping name	Adhesives
Label code(s)	3

14.2 Transport IMDG

Class	3
Packaging group	II
UN number	UN1133
Proper shipping name	ADHESIVES
Danger releasing substance	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
Packaging group	II
UN number	UN1133
Proper shipping name	Adhesives
Label	3

14.4 Other information

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No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, pls. 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 73/78 and the IBC Code

Not relevant

SECTION 15: Regulatory information
15.1 US Federal Regulations
Toxic Substances Control Act (TSCA)

According to the data available and/or specifications supplied by upstream suppliers, all components of this product are on the TSCA Inventory or are exempted from notification requirements.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

The product contains following substance(s) that are considered being subject to Table 302.4 "List of Hazardous Substances and Reportable Quantities"

No	Substance name	CAS no.
1	butanone	78-93-3
2	ethyl acetate	141-78-6
3	zinc oxide	1314-13-2

Clean Air Act (CAA): Hazardous Air Pollutants (HAPS)

The product contains following substance(s) that are considered being "Hazardous Air Pollutants".

No	Substance name	CAS no.
1	zinc oxide	1314-13-2

Clean Water Act (CWA) Section 307 (Toxic Pollutants) and Section 311 (Hazardous Substances)

The product contains following substance(s) that are considered being "Hazardous Substances".

No	Substance name	CAS no.
1	zinc oxide	1314-13-2

EPCRA SARA Section 313, Toxic Chemical Release Inventory

The product contains following substance(s) that are considered being subject to "SARA Reporting".

No	Substance name	CAS no.
1	zinc oxide	1314-13-2

Emergency Planning & Community Right-to-Know Act (EPCRA) - Sections 302 and 304

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered being subject to reporting requirements.

Clean Air Act (CAA) - Section 602 Ozone depleting substances

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) listed as ozone depleting substance.

15.2 US State Regulations
Pennsylvania State Right to Know Hazardous Substance List

The product contains following substance(s) that are considered being "Hazardous Substances".

No	Substance name	CAS no.
1	butanone	78-93-3
2	ethyl acetate	141-78-6
3	zinc oxide	1314-13-2

New Jersey State Right to Know Hazardous Substance List

The product contains following substance(s) that are considered being "Hazardous Substances".

No	Substance name	CAS no.
1	butanone	78-93-3
2	ethyl acetate	141-78-6
3	zinc oxide	1314-13-2

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Massachusetts State Right to Know Hazardous Substance List

The product contains following substance(s) that are considered being "Hazardous Substances".

No	Substance name	CAS no.
1	butanone	78-93-3
2	ethyl acetate	141-78-6
3	zinc oxide	1314-13-2

Right to Know - California State - Proposition 65

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered being "Hazardous Substances".

15.3 Further regulations

According to the information available to the supplier of the data sheet, this product contains no ingredients listed in the Red List of the Living Building Challenge.

SECTION 16: Other information, including date of preparation or last revision

16.1 Other 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.

16.2 Date of preparation/revision of the SDS

Current version	1.0.1	10.09.2020
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16.4 Conclusions

Alterations/supplements:

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

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Prod-ID 768417

16.5 Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists
 ATE – Acute Toxicity Estimate
 BOD - Biochemical Oxygen Demand
 CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania
 CAS - Chemical Abstracts Service
 CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
 CFR - Code of Federal Regulations (US)
 CLP - Classification, Labelling, and Packaging
 DOT - Department of Transportation Commission
 ECHA – European Chemicals Agency
 EC / EL – Effective Concentration / Effective Loading
 EPA - Environmental Protection Agency
 IARC - International Agency for Research on Cancer
 IATA - International Air Transport Association
 IBC – Intermediate Bulk Container
 ICAO - International Civil Aviation Organization
 IDL - Ingredient Disclosure List
 IDLH - Immediately Dangerous to Life and Health
 IMDG - International Maritime Dangerous Goods
 IUCLID - International Uniform Chemical Information Database
 Kow - Octanol/water partition coefficient
 LD/LC - Lethal Dose/ Lethal Concentration
 MARPOL – Marine Pollution
 MEL - Maximum Exposure Limits

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NFPA - National Fire Protection Agency
NIOSH - National Institute for Occupational Safety and Health
NJTSR - New Jersey Trade Secret Registry
NOEL/NOEC – No Observed Effect Level / No Observed Effect Concentration
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PEL- Permissible Exposure Limit
RCRA - Resource Conservation and Recovery Act
SARA - Superfund Amendments and Reauthorization Act
STEL - Short-term Exposure Limit
STOT – Specific Target Organ Toxicity
TDG - Transportation of Dangerous Goods
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
UN/NA - United Nations /North American
US - United States
VLE - Exposure Limit Value (Mexico)
VOC – Volatile Organic Compounds