Armacell MAKING A DIFFERENCE AROUND THE WORLD Safety Data Sheet

Trade name: ArmaFlex Series (EPDM)

Current version : 3.0.0, issued: 24.02.2022

Replaced version: 2.0.3, issued: 14.12.2021

Region: USA

SECTION 1: Identification

1.1 **Product identifier**

Trade name

ArmaFlex Series (EPDM)

- **UT Solaflex**
- **AP ArmaFlex FS**
- **AP ArmaFlex FS Duct Liner**

AP ArmaFlex Pipe Insulation in 1 1/2" and 2" wall thickness

1.2 Recommended use of the chemical and restrictions on use

Recommended use of the chemical and restrictions on use Industrial use Professional use

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 5638 e-mail info.sds.ai.usmca@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 information

This product is an article in the sense of the definition according to CFR (Code of Federal Regulations), Title 29, §1910.1200 "Hazard Communication" and is not subject to the labelling obligations thereof.

2.2 Label elements Not relevant

- 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

This product does not contain substances to be mentioned in accordance with paragraph (d) of 29 CFR § 1910.1200 "Hazard Communication".



Current version : 3.0.0, issued: 24.02.2022

Region: USA

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General information

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

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off with 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).

After ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

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.

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)
- **5.3** Special protective equipment and precautions for fire-fighters Use self-contained breathing apparatus. Wear protective clothing.

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.

For emergency responders

Personal protective equipment (PPE) - see Section 8.

6.2 Methods and materials for containment and cleaning up

Collect mechanically. When collected, handle material as described under the section heading "Disposal considerations". Avoid raising dust.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling

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.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale dust. Avoid

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Current version : 3.0.0, issued: 24.02.2022

MAKING A DIFFERENCE AROUND THE WORLD

contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

Safety Data Sheet

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.

Incompatible products

Substances to be avoided: see chapter 10.

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

No parameters available for monitoring.

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the PEL (=Permissible Exposure Limit), suitable respiratory protection must be worn.

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 dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield

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.

Other protection measures

Chemical-resistant work clothes.

SECTION 9: Physical and chemical properties

Form/Color
Foam material
black
Odor
No data available
Odor threshold
No data available
pH value
No data available
Boiling point / boiling range
No data available
Melting point / melting range
No data available
Decomposition point / decomposition range



MAKING A DIFFERENCE AROUND THE WORLD Safety Data Sheet

Trade name: ArmaFlex Series (EPDM)

Current version : 3.0.0, issued: 24.02.2022

Replaced version: 2.0.3, issued: 14.12.2021

Region: USA

No data available	
Flash point	
No data available	
Auto-ignition temperature	
No data available	
Oxidising properties No data available	
Explosive properties	
No data available	
Flammability	
No data available	
Lower flammability or explosive limits	
No data available	
Upper flammability or explosive limits No data available	
Vapor pressure No data available	
Vapor density	
No data available	
Evaporation rate	
No data available	
Relative density	
No data available	
Density	
No data available	
Solubility in water No data available	
Solubility(ies)	
No data available	
Partition coefficient: n-octanol/water	
No data available	
Viscosity	
No data available	

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

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

No data available.



Current version : 3.0.0, issued: 24.02.2022

Replaced version: 2.0.3, issued: 14.12.2021

Region: USA

10.5 Incompatible materials No data available.

10.6 Hazardous decomposition products No data available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute oral toxicity			
No data available			
Acute dermal toxicity			
No data available			
Acute inhalational toxicity			
No data available			
Skin corrosion/irritation			
No data available			
Serious eye damage/irritation			
No data available			
Respiratory or skin sensitisation			
No data available			
Germ cell mutagenicity			
No data available			
Reproduction toxicity			
No data available			
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).			
	able VII.6.2)		
OSHA Standards listing cancer as a health effect (T According to the data available and/or specifications su		oliers, this product does not cor	
OSHA Standards listing cancer as a health effect (T		oliers, this product does not cor	
OSHA Standards listing cancer as a health effect (T According to the data available and/or specifications su any substance(s) listed as carcinogenic.	pplied by upstream sup ic Risks to Humans		
OSHA Standards listing cancer as a health effect (T According to the data available and/or specifications su any substance(s) listed as carcinogenic. IARC Monographs on the Evaluation of Carcinogeni The product contains following substance(s) classified b	pplied by upstream sup ic Risks to Humans by the IARC Monograph	S	
OSHA Standards listing cancer as a health effect (T According to the data available and/or specifications su any substance(s) listed as carcinogenic. IARC Monographs on the Evaluation of Carcinogeni The product contains following substance(s) classified to No Substance name	pplied by upstream sup ic Risks to Humans by the IARC Monograph CAS no.	s Group	
OSHA Standards listing cancer as a health effect (T According to the data available and/or specifications su any substance(s) listed as carcinogenic. IARC Monographs on the Evaluation of Carcinogeni The product contains following substance(s) classified b	pplied by upstream sup ic Risks to Humans by the IARC Monograph	S	
OSHA Standards listing cancer as a health effect (T According to the data available and/or specifications su any substance(s) listed as carcinogenic. IARC Monographs on the Evaluation of Carcinogeni The product contains following substance(s) classified to the substance name 1 Carbon Black STOT - single exposure	pplied by upstream sup ic Risks to Humans by the IARC Monograph CAS no.	s Group	
OSHA Standards listing cancer as a health effect (T According to the data available and/or specifications su any substance(s) listed as carcinogenic. IARC Monographs on the Evaluation of Carcinogeni The product contains following substance(s) classified to the substance name 1 Carbon Black	pplied by upstream sup ic Risks to Humans by the IARC Monograph CAS no.	s Group	

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information

12.1 Toxicity

No data available	Toxicity to fish (acute)	
	No data available	



MAKING A DIFFERENCE AROUND THE WORLD Safety Data Sheet

Trade name: ArmaFlex Series (EPDM)

Current version : 3.0.0, issued: 24.02.2022

Replaced version: 2.0.3, issued: 14.12.2021

Region: USA

oxicity to fish (chronic)
o data available
oxicity to Daphnia (acute)
o data available
oxicity to Daphnia (chronic)
o data available
oxicity to algae (acute)
o data available

No data available

Toxicity to algae (chronic)

- **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 Other adverse effects No data available.

12.6 Other information

Other information

Do not discharge product unmonitored into the environment.

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)

The product is not subject to DOT regulations.

14.2 Transport IMDG The product is not subject to IMDG regulations.

- **14.3** Transport ICAO-TI / IATA The product is not subject to ICAO-TI / IATA regulations.
- **14.4 Other information** 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



Current version : 3.0.0, issued: 24.02.2022

Replaced version: 2.0.3, issued: 14.12.2021

Region: USA

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.

CEF	CLA (Comprehensive Environmental	Response, Compensation and Liability Act)	
		that are considered being subject to Table 302.4 "List of Hazardous	
Sub	stances and Reportable Quantities"		
No	Substance name	CAS no.	
1	zinc oxide	1314-13-2	
Clea	an Air Act (CAA): Hazardous Air Pollu	itants (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	
Clea	an Water Act (CWA) Section 307 (Toxi	c Pollutants) and Section 311 (Hazardous Substances)	
		that are considered to be "Hazardous Substances".	
No	Substance name	CAS no.	
1	zinc oxide	1314-13-2	
EPC	RA SARA Section 313, Toxic Chemic	al 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			
Acco	ording to the data available and/or speci	fications supplied by upstream suppliers, this product does not contain	
any	substance(s) listed as ozone depleting s	substance.	
	JS State Regulations		
	nsylvania State Right to Know Hazar		
	3	that are considered to be "Hazardous Substances".	
	Substance name	CAS no.	
1	Carbon Black	1333-86-4	
2	zinc oxide	1314-13-2	
	Jersey State Right to Know Hazardo		
The	product contains following substance(s)	that are considered to be "Hazardous Substances".	

No	Substance name	CAS no.		
1	Carbon Black 1333-86-4			
2	zinc oxide	1314-13-2		
	Massachusetts State Right to Know Hazardous Substance List			
The	product contains following substance(s) that are considered	ed to be "Hazardous Substances".		
No	Substance name CAS no.			
1	zinc oxide	1314-13-2		
California Code of Regulations Title 8 §339, Hazardous Substances List				
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered to be "Hazardous Substances".				

Right to Know - California State - Proposition 65				
The product contains following substance(s) that are considered to be "Hazardous Substances".				
No	Substance name	CAS no.	type of toxicity	
1	Carbon Black	1333-86-4	cancer	



Current version : 3.0.0, issued: 24.02.2022

Replaced version: 2.0.3, issued: 14.12.2021

Region: USA

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

No data available.

16.2 Date of preparation/revision of the SDS

Current version	3.0.0	24.02.2022
Replaced version	2.0.3	14.12.2021

16.3 Department issuing 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

16.4 Conclusions

This information is based on our present knowledge and experience. The safety data sheet describes products with a view to safety requirements. It does not, however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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Prod-ID 769700

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 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



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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