

**Trade name:** ArmaFlex Shield

**Current version :** 2.0.0, issued: 24.02.2022

**Replaced version:** 1.0.2, issued: 14.12.2021

**Region:** USA

## SECTION 1: Identification

### 1.1 Product identifier

**Trade name**

**ArmaFlex Shield**

### 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".

## 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**

**Trade name:** ArmaFlex Shield

**Current version :** 2.0.0, issued: 24.02.2022

**Replaced version:** 1.0.2, issued: 14.12.2021

**Region:** USA

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; Dry chemical extinguisher; Foam; Carbon dioxide

**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 (CO<sub>2</sub>)

**5.3 Special protective equipment and precautions for fire-fighters**

Use self-contained breathing apparatus. Wear protective clothing. Run-off water from fire fighting must not be discharged into drains or enter surface water.

## 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 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.

Trade name: ArmaFlex Shield

Current version : 2.0.0, issued: 24.02.2022

Replaced version: 1.0.2, issued: 14.12.2021

Region: USA

**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**

<b>Form/Color</b>	Foam material black
<b>Odor</b>	No data available
<b>Odor threshold</b>	No data available
<b>pH value</b>	No data available
<b>Boiling point / boiling range</b>	No data available
<b>Melting point / melting range</b>	No data available
<b>Decomposition point / decomposition range</b>	No data available
<b>Flash point</b>	No data available
<b>Auto-ignition temperature</b>	No data available

Trade name: ArmaFlex Shield

Current version : 2.0.0, issued: 24.02.2022

Replaced version: 1.0.2, issued: 14.12.2021

Region: USA

<b>Oxidising properties</b>
No data available
<b>Explosive properties</b>
No data available
<b>Flammability</b>
No data available
<b>Lower flammability or explosive limits</b>
No data available
<b>Upper flammability or explosive limits</b>
No data available
<b>Vapor pressure</b>
No data available
<b>Vapor density</b>
No data available
<b>Evaporation rate</b>
No data available
<b>Relative density</b>
No data available
<b>Density</b>
No data available
<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
<b>Other information</b>
<b>Other information</b>
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.

### 10.5 Incompatible materials

No data available.

### 10.6 Hazardous decomposition products

No data available.

## SECTION 11: Toxicological information

Trade name: ArmaFlex Shield

Current version : 2.0.0, issued: 24.02.2022

Replaced version: 1.0.2, issued: 14.12.2021

Region: USA

### 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>NTP Report on Carcinogens (RoC)</b>
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).

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

<b>IARC Monographs on the Evaluation of Carcinogenic Risks to Humans</b>			
The product contains following substance(s) classified by the IARC Monographs			
No	Substance name	CAS no.	Group
1	antimony trioxide	1309-64-4	2B
2	Carbon Black	1333-86-4	2B
3	Hematite (Fe2O3)	1317-60-8	3
4	Polyvinyl chloride	9002-86-2	3

<b>STOT - single exposure</b>
No data available

<b>STOT - repeated exposure</b>
No data available

<b>Aspiration hazard</b>
No data available

## 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>
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Trade name: ArmaFlex Shield

Current version : 2.0.0, issued: 24.02.2022

Replaced version: 1.0.2, issued: 14.12.2021

Region: USA

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

**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**

<b>Other information</b>
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 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

**SECTION 15: Regulatory information**

**15.1 US Federal Regulations**

Trade name: ArmaFlex Shield

Current version : 2.0.0, issued: 24.02.2022

Replaced version: 1.0.2, issued: 14.12.2021

Region: USA

**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	antimony trioxide	1309-64-4
2	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	antimony trioxide	1309-64-4
2	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 to be "Hazardous Substances".

No	Substance name	CAS no.
1	antimony trioxide	1309-64-4
2	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	antimony trioxide	1309-64-4
2	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 to be "Hazardous Substances".

No	Substance name	CAS no.
1	antimony trioxide	1309-64-4
2	Carbon Black	1333-86-4
3	Limestone	1317-65-3
4	zinc oxide	1314-13-2

**New Jersey State Right to Know Hazardous Substance List**

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

No	Substance name	CAS no.
1	antimony trioxide	1309-64-4
2	Carbon Black	1333-86-4
3	Limestone	1317-65-3
4	Polyvinyl chloride	9002-86-2
5	zinc oxide	1314-13-2

**Massachusetts State Right to Know Hazardous Substance List**

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

No	Substance name	CAS no.
1	antimony trioxide	1309-64-4
2	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

**Trade name:** ArmaFlex Shield

**Current version :** 2.0.0, issued: 24.02.2022

**Replaced version:** 1.0.2, issued: 14.12.2021

**Region:** USA

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	antimony trioxide	1309-64-4	cancer
2	Carbon Black	1333-86-4	cancer

## 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	2.0.0	24.02.2022
Replaced version	1.0.2	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](mailto: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 775630

### 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



**Trade name:** ArmaFlex Shield

**Current version :** 2.0.0, issued: 24.02.2022

**Replaced version:** 1.0.2, issued: 14.12.2021

**Region:** USA

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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