

Trade name: ArmaGel DT

Current version : 1.1.0, issued: 25.03.2020

Replaced version: 1.0.0, issued: 24.03.2020

Region: USA

SECTION 1: Identification
1.1 Product identifier
Trade name
ArmaGel DT
1.2 Recommended use of the chemical and restrictions on use
Recommended use of the chemical and restrictions on use

Thermal insulation for pipe-work, vessels and related installation

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.us@armacell.com

1.4 Emergency phone number

(919) 304-8907

SECTION 2: Hazard(s) identification
2.1 Classification of the chemical
Classification information

This product is not subject to classification in accordance with paragraph (d) of 29 CFR § 1910.1200 "Hazard Communication".

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

No	Substance name	Concentration	%
	CAS no.		
1	Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica		
	68909-20-6	>= 25.00 - < 50.00	%-b.w.
2	Glass, oxide, chemicals		
	65997-17-3	>= 25.00 - < 50.00	%-b.w.
3	Polyethylene		
	9002-88-4	>= 5.00 - < 10.00	%-b.w.
4	Manganese ferrite black spinel C.I. Pigment Black 26, C.I. No. 77494		
	68186-94-7	>= 5.00 - < 10.00	%-b.w.
5	magnesium-hydroxide		

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	1309-42-8	>= 5.00	- < 10.00	%-b.w.
6	Aluminium			
	7429-90-5	< 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

General information

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

After inhalation

Ensure supply of fresh air.

After skin contact

When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.

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).

After ingestion

Rinse mouth thoroughly with water.

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

Extinguishing measures to suit surroundings.

Unsuitable extinguishing media

Full water jet

5.2 Specific hazards arising from the chemical

In case of ambient fire possible release of: Oxides of silica; Aluminium oxide; Iron oxide

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. avoid dust development

For emergency responders

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

6.2 Methods and materials for containment and cleaning up

Take up mechanically. When collected, handle material as described under the section heading "Disposal considerations".

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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Precautions for safe handling

Avoid the formation and deposition of dust.

General protective and hygiene measures

Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Avoid contact with eyes and skin. Do not inhale vapours or dust.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Store in a dry place. Protect from heat and direct sunlight.

Incompatible products

Protect against humidity

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limit(s)

No	Substance name	CAS no.	
1	Dust		
OSHA Permissible Exposure Limits (PELS)			
Particulates not otherwise regulated (PNOR) Total dust			
	TWA	15	mg/m ³
OSHA Permissible Exposure Limits (PELS)			
Particulates not otherwise regulated (PNOR) Respirable fraction			
	TWA	5	mg/m ³
2	Manganese ferrite black spinel C.I. Pigment Black 26, C.I. No. 77494	68186-94-7	
ACGIH Threshold Limit Values			
Manganese, elemental and inorganic compounds, as Mn			
	TWA	0,02 (R)	mg/m ³
	Skin resorption / sensibilisation		
	Remarks	A4	
ACGIH Threshold Limit Values			
Manganese, elemental and inorganic compounds, as Mn			
	TWA	0,1 (I)	mg/m ³
	Skin resorption / sensibilisation		
	Remarks	A4	
OSHA Permissible Exposure Limits (PELS)			
Manganese compounds (as Mn), Manganese fume (as Mn)			
	Ceiling Limit	5	mg/m ³

8.2 Exposure controls

Appropriate engineering controls

No data available.

Individual protection measures, such as personal protective equipment

Respiratory protection

Dust mask

Eye / face protection

Safety glasses

Hand protection

Sufficient protection is given wearing suitable protective gloves in the event of risk of skin contact with the product.

Appropriate Material Leather

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Other protection measures

Chemical-resistant work clothes.

SECTION 9: Physical and chemical properties

Form/Color	
solid; Blanket	
gray	
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	
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 (solid, gas)	
not flammable	
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	
Value	160 - 240 g/cm ³
Solubility in water	
No data available	
Solubility(ies)	
No data available	

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Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

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

None, when used as directed.

10.4 Conditions to avoid

Heat, open flames and other sources of ignition. Moisture

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).

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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

The product contains following substance(s) classified by the IARC Monographs

No	Substance name	CAS no.	Group
1	Polyethylene	9002-88-4	3

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration hazard

No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Repeated and prolonged exposure to high dust concentrations may lead to irritation of the respiratory tract.

SECTION 12: Ecological information
12.1 Toxicity
Toxicity to fish (acute)

No data available

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

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.

SECTION 13: Disposal considerations
13.1 Disposal considerations
Product

Dispose 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.

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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

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	Manganese ferrite black spinel C.I. Pigment Black 26, C.I. No. 77494	68186-94-7

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	Manganese ferrite black spinel C.I. Pigment Black 26, C.I. No. 77494	68186-94-7

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

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".

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	Aluminium	7429-90-5
2	Manganese ferrite black spinel C.I. Pigment Black 26, C.I. No. 77494	68186-94-7

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	Aluminium	7429-90-5

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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	Aluminium	7429-90-5
2	Manganese ferrite black spinel C.I. Pigment Black 26, C.I. No. 77494	68186-94-7

Massachusetts State Right to Know Hazardous Substance List

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".

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".

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	1.1.0	25.03.2020
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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 763639

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