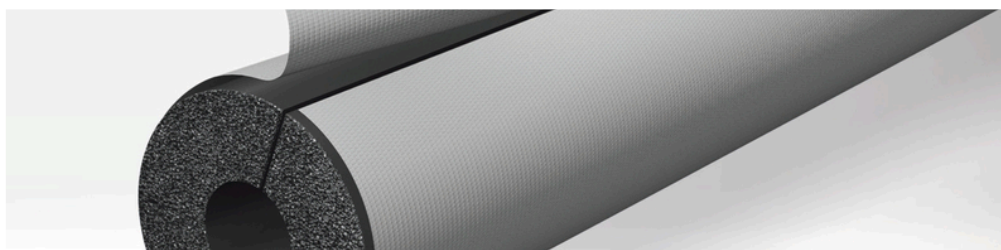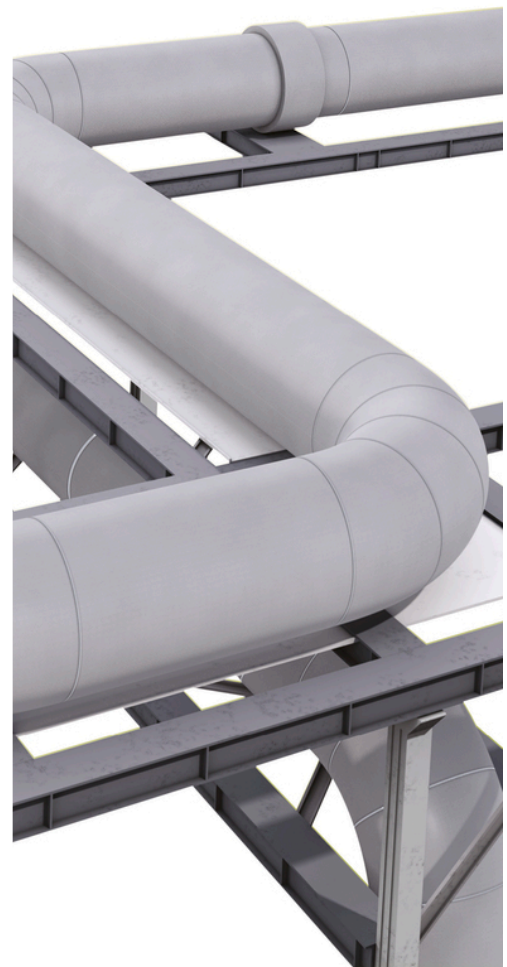# INSTALL IT. SAFEGUARD YOUR EQUIPMENT.

Arma-Chek R

Flexible non-metallic covering for industrial insulation

// Flexible polymeric covering formulated with CSM (CSPE) with combined acoustic barrier performance, ISO 15665 compliant
// Excellent mechanical and weathering protection
// Specially developed for use in offshore and industrial environments
// Reduces the risk of corrosion under insulation (CUI)
// Resistant to UV, salt water and chemicals
// In-built water vapour barrier µ>50.000
// Works in harmony with ArmaFlex , expanding and contracting as required
// IMO certified

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ArmaClad™

TECHNICAL DATA - ARMA-CHEK R

Brief description	Flexible covering system for elastomeric and other insulation material types. Especially developed for use in offshore and industrial environments.
Product colour range	Grey
Special features	Exceptional resistance to UV attack, salt water and mechanical impact. Reduces the risk of Corrosion Under Insulation (CUI). Excellent acoustic performance with natural dampening properties to reduce re-radiation effects.
Product range	Sheets in rolls, 1 and 2 mm thickness / width 700 and 1,400mm. Arma-Chek Mastic is available for sealing of joints and seams.
Applications	Mechanical and weathering protection of insulated pipework, fittings, vessels and equipment in offshore, heavy industry, chemical and petrochemical environments.
Installation	The ArmaFlex and ArmaClad Arma-Chek installation manuals should be consulted before assembly. We offer special installation courses for the application of ArmaClad Arma-Chek.

Approvals and compliance

Specification compliance	• MED Module B (EC type examination certificate) by DNV-GL / IMO 2010 FTP (Fire Test Procedure) Code part 2 and part 5.

Property	Value / Assessment				Standard / Test method

Temperature range

Service temperature[1]	Min. °C	Min. °F	Max. °C	Max. °F	
	-50	-58	100	212	

Fire Performance and Approvals

Reaction to fire	B-s3, d0	EN 13501-1, EN 13823, EN ISO 11925-2
Surface burning characteristics	< 25 flame spread index	ASTM E84
Surface flammability[2]	IMO Part 2 (smoke generation and toxicity) IMO Part 5 (surface flammability) M1	IMO 2010 FTP Code, Part 2, IMO 2010 FTP Code, Part 5, NF P 92-507

Corrosion mitigation

Leachable (water-soluble) chlorides[4]	≤ 100 ppm (mg/kg or µg/g)	EN 13468, ASTM C871[5]
Leachable (water-soluble) ammonia ions[4]	≤ 100 ppm (mg/kg or µg/g)	EN 13468, ASTM C871[5]

Physical attributes

Density	1,650 to 1,750 kg/m³ (103.00 to 109.25 lb/ft³)	ISO 845, ASTM D1622

Mechanical properties

Tensile strength	≥ 4.5 MPa (≥ 653 psi) [MD]	ISO 37[6]
Elongation	≥ 200% [MD/CD]	ISO 37
Bursting strength[4,7]	582.72 N / 131 lbf Section 18.2 of the test standard Result for 2mm material only.	ASTM D751
Puncture resistance[4]	104.44 N / 23.48 lbf Result for 2mm material only.	ASTM D751
Hydrostatic pressure of joints[4]	No leak at 6.89 bar [70.4 m] (100 psi)	ASTM D5385
Resistance to mechanical impact	Good	

Property	Value / Assessment	Standard / Test method
Acoustic performance		
System acoustic insertion loss[8]	When used as part of a system Arma-Chek R complies to ISO 15665 Classes A to C and Shell DEP 31.46.00.31-Gen Class D.	ISO 15665, ISO 3741[9]
Weather and UV resistance		
UV resistance[10]	Excellent	EN ISO 4892-2
Weather resistance	Excellent [Allunga Exposure Laboratory test]	
Resistance to ozone[11]	Excellent	DIN 53509-1
Health and environment		
Fungal growth[4]	No growth	ASTM C1338
Other technical features		
Additional remarks	When installation of Arma-Chek R covering is conducted under ambient temperatures that differ from the final site conditions, or where ambient temperatures are expected to fluctuate, slight wrinkling of the installed Arma-Chek R covering may be expected. Caused by the natural contraction and expansion of the the underlying Armaflex insulation material, this wrinkling is solely aesthetic and has no effect the technical performance or integrity of the installed insulation system. Please consult Technical Services for additional guidance.	
Adhesion and sealing	Armaflex Adhesive 520 or Adhesive HT625 shall be used for reliable adhesion. Minimum overlap should be ensured. Arma-Chek Mastic shall be used for sealing of joints and seams in accordance with our application manual.	
Application conditions[12],[13]	Application temperature: +5°C to +35°C (+41°F to +95°F) Max. relative humidity: 80%	
Shelf life[14]	Maximum of 3 years.	
Storage	Material shall be stored indoors, in clean and dry conditions, away from direct sunlight and in no direct contact with ground.	

[1] Service temperature determined based on thermal ageing behaviour.

[2] The product satisfies the criteria of surface flammability (Part 5) for bulkheads, ceilings and linings as required by IMO 2010 FTP Code for insulation of pipe fittings for cold service systems. Further to this mandatory requirement the product satisfies the criteria of surface flammability (Part 5) and smoke generation and toxicity (Part 2) for floor coverings and primary deck coverings.

[3] Water vapour diffusion resistance factor is based on actual net thickness.

[4] Based on single test results. Can be used for information / reference only.

[5] Specimen prepared according to EN 13486: neither cut, ground nor blended. Test temperature +100°C, leaching time 0.5 hours as specified in the standard for product maximum service temperature.

[6] Type 2 sample.

[7] Result for 2mm material only.

[8] For further information, please contact our Customer Service.

[9] Equivalent method to ASTM E1222.

[10] 1000h cracking, no visible discoloration, 3000 / 5000h cracking under microscope, slight discoloration.

[11] Tested at 48h / 25 ± 5 ppm / 20 ± 2 % elongation / no crack.

[12] Application temperature refers to the ambient temperature during installation and the surface temperature of the substrate (e.g. Arma-Chek R covering) to which the product is installed.

[13] For environmental conditions outside the given range, please contact Technical Services.

[14] Shelf life (maximum storage time) is limited to ensure that only currently manufactured products are installed on projects. This limitation is restricted solely to storage of the product and does not affect the lifetime of product after it has been installed.

OUR CUSTOMERS EXPECT THE BEST. WE WORK HARD TO GO BEYOND THAT AND EXCEED THEIR EXPECTATIONS.

At Armacell we want to create a unique customer experience. We understand the challenges of today's construction industry and support you in the successful delivery of your projects. From planning to delivery, our 360° service supports you throughout the entire process.
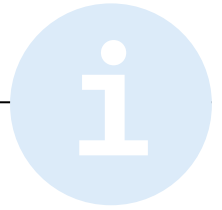
SERVICE AND TECHNICAL INFORMATION AVAILABLE 24/7

At Armacell, we do everything we can to ensure your project runs smoothly. This is why the information about the Armacell services you benefit from is available 24/7 from Armacell.com website as well as from our planning tools (BIM, specification documents, ArmaWin, as well as our sustainable building policy)

DEDICATED LOCAL CONTACTS

We aim to create open lines of communication with our customers. From on-site trainings and webinars by our Armacell technical experts advising on project planning and safety instructions to our local dedicated sales and customer services, your local Armacell dedicated team is working in partnership with you to achieve more together.

DIGITAL INFORMATION FLOWS

From order to delivery, we also provide you with digital information flows such as EDI and other well-known data formats that are widely used in the construction sector worldwide.

LOGISTICS

OUR STANDARD LOGISTICS SERVICES INCLUDE

// Material ordered will be shipped from our facilities within 48 hours after order confirmation

// Full truck loads and full pallets (not mixed – 1 SKU per pallet)

// List prices in this document are based on Ex Works

// Container loading with standard goods

// Customs clearance (including documentation) for standard deliveries outside EU

// Dangerous goods process for road freight

WE GO BEYOND STANDARD SERVICES AND ALSO PROPOSE YOU ADDITIONAL SERVICES*

OPIMISED PACKAGING

- Edge protection
- Strapping
- Doubled stretching
- Reinforced cardboard with extra layer
- Additional warning tape

LABELLING

- Extra label for transport instructions

EXTRA DELIVERY SERVICES

- Just in time delivery
- Delivery with lifting platform for partial or complete load
- Express and direct shipments
- Booking a delivery time slot via your EDP system
- Forklift truck for unloading at construction site
- Air and sea freight deliveries
- Dangerous goods shipment process for air and sea freight

To mitigate cost increases and reduce waste generation, we also propose a pallet return service* by which pallets can be handed at Armacell collection points.

* Please contact your local Customer Service Centre to see which of these services apply to your country.

ABOUT ARMACELL

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency, making a difference around the world every day. With more than 3200 employees and 27 production plants in 19 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology.

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