# ArmaSound® RD 240



# HIGH PERFORMANCE ACOUSTIC INSULATION FOR A QUIETER ENVIRONMENT

- Optimal performance at lower thickness
- Excellent sound absorption behaviour
- Combined acoustic and thermal properties
- Easy application and low maintenance
- Designed for use in demanding environments
- Compliant to ISO 15665 Classes A to C and Shell DEP 31.46.00.31-Gen Class D
- Satisfies acoustic classes 6, 7 and 8 according to NORSOK R-004
- Highly hydrophobic, open-cell structure designed to resist water ingress
- Optimum density, air-flow resistivity and complex pore geometry for maximum acoustic benefit









### RANGE

### **SHEET**

Sheet Self-adhesive sheet

## RECOMMENDED PRODUCTS









ArmaFlex RS850 adhesive



ArmaFlex Cleaner

ArmaSound RD 240 is a highly-flexible, hydrophobic, open-cell acoustic insulation material with complex pore geometry.

Material type	Elastomeric foam based on synthetic rubber.
Colour	Black
Applications	In general applications ArmaSound® RD240 is used as acoustic insulation material with excellent sound absorption performance in a variety of different applications, e.g. fan-coil units, duct linings, cabinet linings, chiller systems, enclosures, pipelines. In industrial applications ArmaSound® RD240 is used as an important component of ArmaSound Industrial Systems to provide acoustic insulation on industrial pipework and vessels ensuring reduction of sound transmission.
Installation	For industrial applications it is recommended to consult the ArmaSound Industrial Systems application manual and other relevant Armacell installation instructions and application manuals. Please consult our Customer Service Centre.
Special features	Excellent sound absorption performance.

Property	Value/Assessment	Standards & Remarks		
Temerature Range				
Max service temperature	+85°C	T		
Min service temperature	-20°C	Tested acc. to EN 14706 and EN 14304		
Thermal Conductivity				
	λ < 0.062 W/(m·K) at 0°C	Tested acc. to EN 12667 (Equivalent methods ASTM C177 and C518)		
Fire Performance				
Reaction to fire	Euroclass E	D4225		
International standards	Class 1	ES6591 Tested acc. to BS 476 Part 7 Approved by Lloyds		
	<25 Flame Spread Index*1	Tested acc. to ASTM E84		
Practical Fire Behaviour	Self-extinguishing, does not drip, does not spread flames			
Density				
	220 to 360 kg/m <sup>3</sup>	Tested acc. to ISO 845, ASTM D1622		
Mechanical properties				
Tear strength	0.4 to 1.4 kN/m	Tested acc. to ISO 34-1*3		
Tensile strength	70 to 190 kPa 10.2 to 27.6 psi	Tested acc.to ISO 1798		
Elongation	50 to 90 %	Tested acc. to ISO 1798		
Other technical features				
Weather resistance	In all industrial applications, except for enclosures and other similar outer layer of the material must be protected with an adequate covor preformed UV-cured GRP (Glass-Reinforced Plastic) cladding. F	ering like Arma-Chek R, metal jacketing		
Health aspects	Fibre dust free			
Water absorption*1	4.4% by volume	Tested acc. to AGI Q 136		
Application & handling conditions*4	Ambient temperature: Max. relative humidity: +5 °C to +35 °C 80%			
Sealing and adhesion	Use ArmaFlex 520 or HT625 adhesive for reliable adhesion of joints and seams. In some configurations 19mm wide stainless steel bands with wing clips (or blind rivets) can be used for fixing and final securing.			
Storage & Shelf life*5	3 years	Store indoors, in dry conditions, away from direct sunlight.		

Property	value/Assessmen	it.						iest & Special Remarks
Acoustic Performance								
Acoustic insertion loss		When used as part of a system ArmaSound RD 240 complies to ISO 15665 Classes B to C and Shell DEP 31.46.00.31-Gen Class D				Tested according to ISO 3741 (equivalent method ASTM E1222) Classified according to ISO 15665		
	Octave band sound	d absorption	n coefficient	s, as:				Tested according to ISO 354. Rated according to EN ISO 11654
	Thickness (mm)			Frequen	icy (Hz)			
	Tilless (IIIII)	125	250	500	1000	2000	4000	
	6	0.01	0.03	0.07	0.18	0.39	0.74	
	10	0.01	0.04	0.15	0.46	0.87	0.94	
	15	0.03	0.11	0.38	0.80	1.03	0.89	
	25 (a)	0.09	0.28	0.77	1.03	0.94	0.90	
Sound absorption (typical values)*2	0.80 0.60 0.40 0.20 0.00	6mm	10mr	1000 n -0- 15r	nm	5mm	1000C (Hz)	Tested according to ISO 354. Rated according to EN ISO 11654
	Thickness (mm) 6 10 15 25							
absorption	a <sub>w</sub>			0.15 (H)	0.25 (H)	0.40 (H)	0.55 (H)	Tested according to ISO 354
coefficients, a <sub>w</sub> :	Class			Е	Е	D	С	Rated according to EN ISO 11654
Noise reduction coefficients (NRC):	NRC			0.15	0.40	0.60	0.70	Calculated according to ASTM C423-01

Test & Special Remarks

- \*1. Based on single test results which are not monitored in regular frequency. Can be used for information / reference only.
- \*2. The octave band and 1/3rd octave band sound absorption coefficients shown in the table and chart respectively, are provided as examples which are based on single test results. The values presented can be used for information / reference only.
- \*3. Angle test piece with a nick.

**Property** 

Value/Assessment

- \*4. For environmental conditions outside the given range please contact our Customer Service Centre.
- \*5. Shelf life (maximum storage time) is limited in order to make sure that only currently manufactured products are applied 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.

All data and technical information are based on results achieved under typical application conditions. Recipients of this information should, in their own interest and responsibility, clarify with us in due time whether or not the data and information apply to the intended application area. For temperatures below -40 °C please contact our Customer Service Centre to request the corresponding technical information. Armacell takes every precaution to ensure the accuracy of the data provided in this document and all statements, technical information and recommendations contained within are believed to be correct. However, Armacell cannot guarantee that the data is 100% accurate. Furthermore, minor deviations in colour, quality and dimensions are unavoidable and in most cases do not influence the performance of the product. Armacell expressly disclaims any and all liability in relation to any results obtained or arising from any use of the product or reliance on such information. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the goods described or the information provided herein. All the statements and technical information within this document should be read in conjunction with the customer's own specification. It is the responsibility of the recipient to inform all involved parties about the content of these documents. The described and recommended methods should be strictly followed. If there is a requirement to deviate from our recommendations, please contact us in advance to discuss possible suitable alternatives. Armacell will not be liable for any claim resulting from a failure to observe our specification or any other agreed solutions and from non-observance of the customer's specification.

#### **SHEET**

Colour - Black



Code	Thickness (mm)	Width (m)	Length (m)	m²/carton	
ASD-240-06 •	6	1	1	8	
ASD-240-10 •	10	1	1	5	
ASD-240-15 •	15	1	1	3	
ASD-240-20 ◆	20	1	1	2	
ASD-240-25 ◆	25	1	1	2	

### **SELF-ADHESIVE SHEET**

Colour - Black



Code	Thickness (mm)	Width (m)	Length (m)	m²/carton	
ASD-240-06/A •	6	1	1	8	
ASD-240-10/A •	10	1	1	5	
ASD-240-15/A •	15	1	1	3	
ASD-240-20/A •	20	1	1	2	
ASD-240-25/A •	25	1	1	2	

#### Other information

• Not a stock item

Further dimensions and insulation thicknesses are available on request.

# ArmaFlex® 520



# TRIED & TESTED FOR SUPERIOR ARMAFLEX RELIABILITY

- Fast drying contact adhesive
- Specially formulated for Armaflex® insulation
- Ensures reliable vapour-tight seal
- For operating temperatures up to +105 °C
- One-component industrial adhesive
- · Low viscosity, air drying adhesive

Specially formulated adhe	esive for insulating Armaflex insulatiuon.
Material type	Contact adhesive on polychloroprene basis, free of aromatic components.
Colour	Beige
Material special info	Liquid
Applications	Gluing of all flexible ArmaFlex insulation materials (except HT/ArmaFlex & ArmaFlex Ultima).
Special features	Specially formulated adhesive for uniform and safe seam bonding of ArmaFlex insulation materials.
Assembly	Application temperature: ideally +20°C, not below 0°C. At temperatures below +5°C or high humidity approx above 80%), increased condensation may form on the surfaces to be glued or adhesive films. In these cases bonding is poor or impossible. This can be tested by using absorbent paper (blotting or crepe paper). Work should not be carried out on operating plant or areas exposed to strong sunlight. Shake and stir well before use. Apply thinly to the areas to be bonded with a brush or spatula. For contact adhesion press together with force during the contact adhesion time. Detailed application guidance is available.
Remarks	The adhesive achieves its final strength after 36 hours. Only then should plant be put into operation. Never insulate plant which is in operation or work in strong sunlight. Wait 36 hours before applying coatings (exception: ArmaFinish 99), adhesive tape, coverings etc.

Temperature Range	
Max service temperature	+105°C
Min service temperature	-50°C (for temperatures below -50 °C please contact our technical department)
Performance	
Coverage (guidance only)	Minimum consumption with the adhesive applied to both surfaces:  ArmaFlex tubes (thickness > consumption unslit > consumption slit)  • 10mm > 1,120m per litre > 140m per litre  • 20mm > 280m per litre > 70m per litre  • 30mm > 175m per litre > 45m per litre  • 40mm > 130m per litre > 35m per litre  ArmaFlex Sheets  • 3-4 m² per litre

#### Storage & shelf life

12 months. Store as cool as possible but protected from frost. In the event of frost any gelification is reversible on warming

#### **Preparation of surfaces**

Clean surfaces and ArmaFlex Ultima surface with Armaflex Cleaner.

Compatibility with bases:

- Very good adhesion to metallic sufaces.
- The adhesive's compatibility with colour coated sufaces needs to be tested.
- Incompatible with asphalt, bitumen and red lead (linseed oil-based)

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Wet adhesion time	Up to 2 minutes
Drying time	3- 5 mins
Contact adhesion	15 - 20 mins
Setting	36 hours

The open time depends on the quantity as well as indoor climate conditions. Before operating plant the setting time needs to be allowed to elapse.

Other i	technical	features
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Flash point	approx -20 °C
Expolsion limits	Lower: approx 1 Vol %, Upper: approx 13 Vol %
Hazard class	Highly flammable, Regulation of inflammable liquids.
Ageing stability	Very good
Resistance to weathering	Very good
Recycling	Allocation of a waste code number, according to the European Waste Catalouge, should be carried out in agreement with the regional waste disposal company. For details see relevant Safety Data Sheet.  Packaging must be emptied of all residues. Packaging with traces of cured product can be recycled.  Packaging with uncured product must be recycled into new product.
Transport classes	Depending on the type of transport

#### **ARMAFLEX 520**



Code	Description	Pieces/carton	£/pc
ADH-520/0.25E	ArmaFlex 520 0.25 Litre can with brush	24	8.82
ADH-520/0.5E	ArmaFlex 520 0.5 Litre can	12	15.20
ADH-520/1.0E	ArmaFlex 520 1.0 Litre can	12	25.67
ADH-520/2.5E	ArmaFlex 520 2.5 Litre can	8	64.19

## ArmaFlex RS850

## NON-DRIP ADHESIVE FOR FASTER & CLEANER APPLICATIONS.

- Minimum solvent emissions when idle
- Ideal for hard to access areas
- Extended shelf-life
- Reduced solvent content to meet requirements for sustainable building projects
- Superior bonding with Armaflex
- Thixotropic gel based adhesive
- Low viscosity, air drying adhesive



Non-drip one component adhesive in gel form. Specifically developed for ArmaFlex insulation materials based on synthetic rubber.			
Material type	Thixotropic contact adhesive on polychloroprene basis.		
Colour	Beige		
Material special info	Gel form		
Applications	Application on pipes, ducts and tanks with service temperature up to +70°C. Gluing of all flexible ArmaFlex insulation materials (except HT/ArmaFlex & ArmaFlex Ultima).		
Special features	ecially formulated adhesive for uniform and safe seam bonding of ArmaFlex insulation materials.		
Assembly	Please observe our installation instructions/product data sheets.  Application temperature: ideally +20°C, not below 0°C. At temperatures below +5°C or high humidity appr above 80%), increased condensation may form on the surfaces to be glued or adhesive films. In these case bonding is poor or impossible. This can be tested by using absorbent paper (blotting or crepe paper). Work should not be carried out on operating plant or areas expossed to strong sunlight.  Shake and stir well before use. Apply thinly to the areas to be bonded with a brush or spatula. For contact adhesion press together with force during the contact adhesion time. Detailed application guidance is avalable.		
Remarks	The adhesive achieves its final strength after 24 hours. The system should never be operated during this time and any self-adhesive tape or protective coating (exception: ArmaFinish 99), should only be applied after the time has elapsed.		

Temperature Range			
Max service temperature	+70°C		
Min service temperature	-40°C		
Performance	Performance		
Coverage (guidance only)	Minimum consumption with the adhesive applied to both surfaces:  ArmaFlex tubes (thickness > consumption unslit > consumption slit)  10mm > 1,120m per litre > 140m per litre 20mm > 280m per litre > 70m per litre 30mm > 175m per litre > 45m per litre 40mm > 130m per litre > 35m per litre ArmaFlex Sheets 3-4 m² per litre		

#### Storage & shelf life

36 months in an unopened container.

Store between  $0^{\circ}$ C and  $35^{\circ}$ C in a dry place. Do not store with explosive substances or spontaneosly combusting substances. Store as cool as possible but protected from frost. Cold or frozen adhesive (under  $5^{\circ}$ C) will become fully useable if slowly acclimatised up to working temperature (approx  $20^{\circ}$ C)

#### **Preparation of surfaces**

Clean surfaces and ArmaFlex Ultima surface with Armaflex Cleaner.

Compatibility with bases:

- Very good adhesion to metallic surfaces.
- The adhesive's compatibility with colour coated surfaces needs to be tested.
- Incompatible with asphalt, bitumen, red lead (linseed oil-based), polystyrene and plasticated PVC

Woking time at 20 °C	
Wet adhesion time	Up to 2 minutes
Drying time	2 min
Contact adhesion	10 - 15 mins
Setting	24 hours

The open time depends on the quantity as well as indoor climate conditions. Before operating plant the setting time needs to be allowed to elapse.

Other	techn	ical 1	features	5
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Flash point	approx -17 °C	
Expolsion limits	Lower: approx 1.1 Vol %, Upper: approx 11.5 Vol %	
Hazard class	Highly flammable, Regulation of inflammable liquids.	
Ageing stability	Very good	
Resistance to weathering	g Very good	
Recycling  Allocation of a waste code number, according to the European Waste Catalouge, should be carried out in agreement with the regional waste disposal company. For details see relevant Safety Data Sheet.  Packaging must be emptied of all residues. Packaging with traces of cured product can be recycled.  Packaging with uncured product must be recycled into new product.		
Transport classes	Depending on the type of transport	

#### **ARMAFLEX RS850**



Code	Description	Pieces/carton	£/pc
ADH-RS850/0.5	ArmaFlex RS850 0.5 Litre can	6	25.44

# ArmaFlex Cleaner

## SURFACE CLEANER FOR ARMAFLEX INSTALLATIONS

- Ensures a clean surface before the use of ArmaFlex® Adhesives
- Removal of dirt from surfaces
- Cleaning of brushes and tools contaminated with ArmaFlex® adhesive



ARMAFLEX Cleaner Special cleaner for use with all ArmaFlex adhesives		
Colour	Clear	
Material special info	Liquid	
Applications	Cleaning of surfaces where ArmaFlex is to be installed.	
Assembly	To ensure a perfect adhesion all contaminated sufaces, including ArmaFlex, must be cleaned. In addition the cleaner can be used to sufaces where ArmaFinish 99 is being applied.	
Remarks	Can also be used to clean tools.	

Technical features		
Storage & shelf life	12 months sealed in original container. Keep container tightly closed in a cool, well ventilated place. Protect from heat & direct sunlight. Do not store together with explosive substances or spontaneously combusting subtances.	
Preparation of surfaces	Clean surfaces and ArmaFlex surface with ArmaFlex Cleaner. Compatibility with bases:  • Very good adhesion to metallic sufaces.  • The adhesive's compatibility with colour coated sufaces needs to be tested.  • Incompatible with asphalt, bitumen and red lead (linseed oil-based)	
Flash point	approx -20 °C	
Explosion limits	Lower: approx 1% Vol, Upper: approx 13 % Vol. Regulation of inflammable liquids.	
Recycling	Allocation of a waste code number, according to the European Waste Catalouge, should be carried out in agreement with the regional waste disposal company. For details see relevant Safety Data Sheet. Packaging must be emptied of all residues. Cans must be emptied prior to recycling. Cans containing adhesive must be recycled into new product.	
Transport classes	Dependent on the transport sector	

### **ARMAFLEX CLEANER**



Code	Description	Pices/carton
CLEANER/1.0	Special cleaner for use with ArmaFlex Adhesive	4

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