

Technical Data Sheet			
Version	1		
Revision date	5/9/2018	First published	5/9/2018

MSP360 Premium Adhesive & Sealant

New ultra-strong adhesive/sealant for use with almost any material!

DESCRIPTION

Marmox MSP 360 Premium Adhesive and Sealant is our ultra-high performance, professional, heavy duty, exterior/interior, ready to use adhesive and sealant. It is made in the UK using the latest Advanced Modified Silane-Polymer (MSP) Technology; acquiring the best properties of conventional acrylic, silicone, butyl, polyurethane, and other hybrid based adhesives/sealants. Therefore Marmox MSP 360 is the all-in-one super solution that replaces all your tubes of adhesives & sealants into just one tube.

Marmox MSP360 is paintable, odourless and free of isocyanates. It has excellent adhesion to non-porous surfaces and will bond to damp surfaces – even cures under water. Other features include; Instant grab, Noise attenuation >62dB, Fast curing – skin formation 10 minutes, UV/Weather resistance, excellent anti-pick qualities and once MSP360 sets, it becomes incredibly strong – practically unbreakable bond and fully waterproof.

Marmox MSP360 is compatible with virtually all materials including the entire Marmox range of products. E.g. Marmox Thermoblock. As well as all exterior and interior applications: Sealing joints around sanitary fixtures, weatherproofing joints around windows/ doors, glazing systems, joints and assemblies in coach body work. Will seal and bond glass, porcelain, coated metal, epoxy and polyester panels, polystyrene, PVCu, stainless steel, anodised aluminium and finished wood. Also, may be used safely in the food preparation areas.

FEATURES

- Exterior/Interior use
- Crystal clear
- Exceptionally strong bond – practically unbreakable!
- UV/Weather resistant
- Instant grab
- Fast cure – Skin formation 10 minutes
- Noise attenuation adhesive >62dB
- Can apply be applied to damp surfaces – Even cures underwater!
- Cannot discolour – Stays crystal clear
- Complies with the requirements of GEV, with EMICODE emission class EC1^{PLUS} (which is the best possible environmental and indoor hygiene health protection)
- Free of Isocyanates
- Environmentally friendly
- FDA Approved
- Can be used in food preparation areas
- Excellent anti-pick qualities
- Antifungal
- Easy to apply and tool
- Prevents bacteria growth
- Odorless
- Does not shrink
- Non-staining
- Can be painted
- Comes with Marmox's Lifetime Guarantee



USAGE

Joint size (mm)	6x6	9x6	12x6	25x10	7x7 fillet	10x10 fillet
linear metre/ cartridge	8.3	5.3	3.9	1.1	1.9	5.8

SUBSTRATES

Marmox MSP360 premium Adhesive and Sealant is ideal for use with all Marmox products, eg. Thermoblock, as well as:

- Polystyrene
- Brick/Masonry
- Concrete/Plaster
- Metals (incl. Lead)
- Plastics
- Woods
- Tiles
- Glass/Mirrors
- PVCu
- Ceramics/Stone

APPLICATION INSTRUCTIONS

All surfaces must be clean and sound, free from dirt, grease and other contamination.

Cut the cartridge seal and screw on the nozzle which should be cut to your required size. Using a skeleton gun, apply the sealant into the gap or joint to provide a good solid fill. If required place masking tape along edges, removing within 10 minutes of application.

For gluing applications, apply adhesive in vertical lines at a distance of 30cm. Support the item that is being fixed for 24 hours until full curing occurs.

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SOUND INSULATION

Marmox MSP360 premium Adhesive and Sealant has been tested at BM Trada (UKAS accredited); according to EN ISO 10140-2:2010. Usage of any backing material is optional, due to the tests being conducted with sealant only.

Description	Sound Reduction
Single sided seal ≥ 12 mm depth	62dB
Double sided seal ≥ 12 mm depth	>62dB

EMISSION DATA INDOOR AIR QUALITY

Marmox MSP360 premium Adhesive and Sealant complies with the requirements of GEV and the results correspond to the EMICODE emission class EC1^{PLUS} which is the best possible environmental and indoor hygiene health protection mark.

COMPOUND	EMISSION RATE AFTER 3 DAYS	EMISSION RATE AFTER 4 WEEKS
TVOC	40 $\mu\text{g}/\text{m}^3$	< 5 $\mu\text{g}/\text{m}^3$
TSVOC	n.d.	n.d. (< 5 $\mu\text{g}/\text{m}^3$)
VOC w/o NIK	n.d.	n.d. (< 5 $\mu\text{g}/\text{m}^3$)
R Value	< 1	< 1
Formaldehyde	< 3 $\mu\text{g}/\text{m}^3$	< 3 $\mu\text{g}/\text{m}^3$
Acetaldehyde	< 3 $\mu\text{g}/\text{m}^3$	< 3 $\mu\text{g}/\text{m}^3$
Sum for+ace	< 0.002 ppm	-
Carcinogenic	n.d. (< 1 $\mu\text{g}/\text{m}^3$)	n.d. (< 1 $\mu\text{g}/\text{m}^3$)
n.d. = not detected		

Tested by Eurofins Product Testing, report number 392- 2014-00011601_B.

TECHNICAL DATA

Slump ISO 7390	mm	<2
Density	g/ml	1.06
Skin forming time 23°C/55%RH	min	10
Max movement allowed ISO 9040	%	20
Temperature resistance after curing	°C	-30 to 100
Shrinkage		nil
Curing (24 hours) 23°C/55%RH	mm	2
Mechanical properties, 2mm film		
Hardness, Shore A DIN 53505		45
Modulus, 100% DIN 53504	MPa	1.15
Tensile strength DIN 53504	MPa	2.40
Elongation at break DIN 53504	%	250

LIMITATIONS

Marmox MSP360 premium Adhesive and Sealant is not recommended for application on PE, PP, Teflon, wax, neoprene and bituminous surfaces. Not paintable with alkyd resin based paint. Not suitable for applications in direct contact with sealing of insulation glass or in direct contact with PVB foil or coat glass.

On porous surfaces such as concrete a primer is recommended. It is the user's responsibility to determine suitability. Adhesion tests prior to application are recommended. Store between +5°C and +25°C in dry conditions.

12 month shelf life from date of manufacture (indicated on label).

HEALTH AND SAFETY

Wash the material from the skin while still wet. Material in contact with eyes should be washed out immediately with water. Seek medical advice if dis-comfort persists.

More detailed information can be found in the relevant **Marmox MSP360 premium Adhesive and Sealant** Safety Data Sheet.

ACTIVE INGREDIENTS

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
N-(3-(trimethoxysilyl)propyl)ethylenediamine
N-[3-(dimethoxymethylsilyl)propyl]ethylenediamine
Diocetylbinis(acetylacetonate)

PACKAGING

Marmox MSP360 premium Adhesive and Sealant is available in 290ml cartridges, 12 cartridges per brown carton.

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APPLICATION CHART – EXTERNAL

A – Excellent B – Good C – Fair

EXTERNAL FACADES	RATE
MASONRY	
Concrete / Cellular concrete / Brick work	B
Granite / Marble / Natural stone	B
WOOD	
Fibre board / veneer	B
Solid and untreated wood	B
GLASS / CERAMICS	
Glass	A
Layered glass	A
Reflective glass	A
METALS	
Copper and copper alloys	B
Iron	B
Lead	A
Stainless steel	B
Untreated and anodised aluminum	B
Zinc	B
SYNTHETIC MATERIALS	
Acrylic / Fibreglass	A
PMMA (Plexiglass / Perspex)	A
Polycarbonate	A
PVC and PVCu	A
OTHERS	
Expansion joints	B
Leadwork	A
Plumbing	B
Polystyrene	A
Stonework	A

ROOFS	RATE
Bitumen	C
Copper and copper alloys	B
Expansion joints	B
Glass	A
Guttering	A
Layered glass	A
Lead	A
Leadwork	A
Plumbing	B
PMMA (plexiglass / perspex)	A
Polycarbonate	A
Polystyrene	A
Reflective glass	A
Stainless steel	B
Stonework	A
Untreated and anodised aluminum	B
Woodwork	B
Zinc	B

Due to the diversity of applications and substrates Marmox (UK) Ltd cannot accept responsibility for results obtained using this chart.

It is suggested a preliminary test be carried out first to check bond and seal.



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APPLICATION CHART – INTERNAL

A – Excellent B – Good C – Fair

INTERNAL GENERAL AREAS	RATE
MASONRY	
Cementitious fibre	B
Concrete / Cellular concrete / Brick work	B
Granite / Marble / Natural stone	B
Plaster	B
WOOD	
Fibre board / veneer	B
Solid and untreated wood	A
GLASS / CERAMICS	
Ceramics / Porcelain	A
Glass	A
Layered glass	A
Reflective glass	A
METALS	
Copper and copper alloys	B
Iron	B
Lead	B
Stainless Steel	B
Untreated and anodised aluminium	B
Zinc	B
SYNTHETIC MATERIALS	
Acrylic / Fibreglass	A
PMMA (Plexiglass / Perspex)	B
Polycarbonate	B
Polyester	B
PVC and PVCu	A
OTHERS	
Acoustic sealing	A
Dry lining	B
Ductwork	B
Expansion joints	A
Frame fixing	B
Internal frame sealing	B
Low emission zones	B
Mirror Fixing	B
Plumbing	B
Polystyrene	B
Skirting & architraves	B
Stonework	B
Woodwork	B

BATHROOMS/SANITARY/PUBLIC BATH HOUSES	RATE
MASONRY	
Cementitious fibre	B
Concrete / Cellular concrete / Brick work	B
Granite / Marble / Natural stone	B
Plaster	B
GLASS / CERAMICS	
Ceramics / Porcelain	A
Glass	A
Layered glass	A
Reflective glass	A
METALS	
Copper and copper alloys	B
Stainless Steel	B
Untreated and anodised aluminium	B
Zinc	B
SYNTHETIC MATERIALS	
Acrylic / Fibreglass	A
PMMA (Plexiglass / Perspex)	B
Polycarbonate	B
Polyester	B
PVC and PVCu	A
OTHERS	
Acoustic sealing	A
Dry lining	B
Ductwork	B
Expansion joints	B
Frame fixing	B
Internal frame sealing	B
Low emission zones	B
Mirror fixing	B
Plumbing	B
Polyseylene	B
Skirting & architraves	B
Stonework	B
Woodwork	B

KITCHENS	RATE
Acoustic sealing	A
Concrete / Cellular concrete / Brick work	B
Dry Lining	B
Ductwork	B
Fibre board / veneer	B
Glass	B
Granite / Marble / Natural stone	B
Internal frame sealing	B
Plumbing	B
Professional food preparation areas	A
Skirting & architraves	B
Solid and untreated wood	B
Stainless steel	B
Untreated and anodised aluminum	B
Woodwork	B

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