

MS-FLEX 445

DEFINITION

One-component, moisture-curing adhesive/sealant, based on silane-terminated hybrid polymers.

It is ideal for replacing windscreens and glasses on vehicles with or without airbags and in general for bonding and sealing of glass in automotive, industrial, railway and nautical applications.

Suitable where a strong coupling is required as well as the ability of compensating and absorbing any thermal expansion of the materials, vibrations, and temperature changes.

DRIVE AWAY TIME: 8h

(at 23°C and 50% r.h., for vehicles with security dual air bag)

BENEFITS

- Excellent adhesive power
- Odorless, free of solvents and isocyanates
- Neutral polymerization: non-corrosive on surfaces
- Absorbs stress related to thermal expansion and material tension
- Does not swell, does not shrink, does not sag
- Broad adhesion spectrum
- Excellent resistance to chemical and atmospheric agents

CHARACTERISTICS

- Chemical nature: MS-hybrid-polymer
- Appearance: Thixotropic paste
- Colour: black
- Density: $1,53 \pm 0,03 \text{ g/cm}^3$
- Operating temperature: -40°C to +90°C; with short peaks at +200°C (es. powder coating)
- Hardness Shore A: 55
- Elongation at break: 250 %
- Tensile strength: 3.0 N/mm^2

SUBSTRATE PREPARATION

The surfaces to be treated must be perfectly clean, dry and degreased.

The effectiveness of our products is based on practical experiences and research work carried out in our laboratories; nevertheless we accept no liability for work carried out following our instructions being clear that the final result depends in all cases on a series of unforeseeable factors.

* For any information about product codes or packs, please see our catalogue, our price list or contact us.

Apply a suitable cleaner, for example Cleaner Activator, to both surfaces to be glued with a lint-free cotton cloth. Let dry at least 10 minutes before proceeding.

The product adheres to many substrates without primer. A preventive treatment with Black Glass Primer is recommended on glass and absorbent surfaces.

Applying Black Glass Primer is necessary when sealing a windshield without the black ceramic edge. Refer to the relevant documentation of each product for the drying times and observe them.

APPLICATION

Application temperature: +5°C to +40°C

Apply MS Flex 445 to the black edge of the windscreen with a thickness of at least 5 mm.

Immediately install the windscreen. It can be centered for about 2 minutes and then it must be fixed into position.

Wait at least 8 hours before using the vehicle (CARS).

DRYING TIMES

- Skin formation time (23°C, 50% r.h.): 4-10 minutes
- Curing rate (23°C, 50% r.h.): 3,0 mm after 24 hours
- Drive-away time (23°C, 50% r.h.): 8 h

STORAGE

Store the product in a dry place, protected from direct sunlight, at temperatures between 5°C and 35°C.

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MS-FLEX 445 NEW

DEFINITION

One-component, moisture-curing adhesive/sealant, based on silane-terminated hybrid polymers.

It is ideal for replacing windscreens and glasses on vehicles with or without airbags and in general for bonding and sealing of glass in automotive, industrial, railway and nautical applications.

Suitable where a strong coupling is required as well as the ability of compensating and absorbing any thermal expansion of the materials, vibrations, and temperature changes.

DRIVE AWAY TIME: 30 min

(at 23°C and 50% r.h., for vehicles with security dual air bag)

Complies with FMVSS 212.

BENEFITS

- Excellent adhesive power
- Odorless, free of solvents and isocyanates
- Neutral polymerization: non-corrosive on surfaces
- Absorbs stress related to thermal expansion and material tension
- Does not swell, does not shrink, does not sag
- Broad adhesion spectrum
- Excellent resistance to chemical and atmospheric agents

CHARACTERISTICS

- Chemical nature: MS-hybrid-polymer
- Appearance: Thixotropic paste
- Colour: black
- Density: $1,33 \pm 0,03 \text{ g/cm}^3$
- Operating temperature: 40°C to +90°C; with short peaks at +200°C (es. powder coating)
- Shore A Hardness: 55
- Elongation at break: 325 %
- Tensile strength: 3.0 N/mm^2

The effectiveness of our products is based on practical experiences and research work carried out in our laboratories; nevertheless we accept no liability for work carried out following our instructions being clear that the final result depends in all cases on a series of unforeseeable factors.

* For any information about product codes or packs, please see our catalogue, our price list or contact us.

SUBSTRATE PREPARATION

The surfaces to be treated must be perfectly clean, dry and degreased.

Apply a suitable cleaner, for example Cleaner Activator, to both surfaces to be glued with a lint-free cotton clot. Let dry at least 10 minutes before proceeding.

The product adheres to many substrates without primer. A preventive treatment with Black Glass Primer is recommended on glass and absorbent surfaces.

Applying Black Glass Primer is necessary when sealing a windshield without the black ceramic edge. Refer to the relevant documentation of each product for the drying times and observe them.

APPLICATION

Application temperature: +5°C to +40°C

Apply MS Flex 445 New to the black edge of the windscreen. Using the supplied nozzle, extrude a 6 mm-side triangular bead on the area to be glued.

Immediately install the windscreen. It can be centered for about 2 minutes and then it must be fixed into position.

Wait at least 30 minutes before using the vehicle.

DRYING TIME

- Skin formation time (23°C, 50% r.h.): 3-7 minutes
- Curing rate (23°C — 50% r.h.): 3,5 mm after 24 hours
- Drive-away time (23°C — 50% r.h.): 30 minutes

STORAGE

Store the product in a dry place, protected from direct sunlight, at temperatures between 5°C and 35°C.

The effectiveness of our products is based on practical experiences and research work carried out in our laboratories; nevertheless we accept no liability for work carried out following our instructions being clear that the final result depends in all cases on a series of unforeseeable factors.

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MS-FLEX 445 BUS

DEFINITION

One-component, moisture-curing adhesive/sealant, based on silane-terminated hybrid polymers.

It is ideal for replacing windscreens and glasses on vehicles with or without airbags and in general for bonding and sealing of glass in automotive, industrial, railway and nautical applications.

Suitable where a strong coupling is required as well as the ability of compensating and absorbing any thermal expansion of the materials, vibrations, and temperature changes.

DRIVE AWAY TIME: 4h

(at 23°C and 50% r.h., for vehicles with security dual air bag)

Complies with FMVSS 212.

BENEFITS

- Excellent adhesive power
- Odorless, free of solvents and isocyanates
- Neutral polymerization: non-corrosive on surfaces
- Absorbs stress related to thermal expansion and material tension
- Does not swell, does not shrink, does not sag
- Broad adhesion spectrum
- Excellent resistance to chemical and atmospheric agents
- Low conductivity and high dielectric strength make it suitable for use with integrated antennas or other electrical components.

CHARACTERISTICS

- Chemical nature: MS-hybrid-polymer
- Appearance: Thixotropic paste
- Colour: black
- Density: $1,44 \pm 0,03 \text{ g/cm}^3$
- Operating temperature: -40°C to +90°C; with short peaks at +120°C
- Hardness Shore A: 62
- Elongation at break: 230 %
- Tensile strength: 3.0 N/mm^2

The effectiveness of our products is based on practical experiences and research work carried out in our laboratories; nevertheless we accept no liability for work carried out following our instructions being clear that the final result depends in all cases on a series of unforeseeable factors.

* For any information about product codes or packs, please see our catalogue, our price list or contact us.

SUBSTRATE PREPARATION

The surfaces to be treated must be perfectly clean, dry and degreased.

Apply a suitable cleaner, for example Cleaner Activator, to both surfaces to be glued with a lint-free cotton clot. Let dry at least 10 minutes before proceeding.

The product adheres to many substrates without primer. A preventive treatment with Black Glass Primer is recommended on glass and absorbent surfaces.

Applying Black Glass Primer is necessary when sealing a windshield without the black ceramic edge. Refer to the relevant documentation of each product for the drying times and observe them.

APPLICATION

Open using a blade by making an incision on the side opposite the silver seal, approximately 1 cm from the metal clip towards the "shoulder" of the bag.

Apply MS Flex 445 Bus to the black edge of the windscreen. Using the supplied nozzle, extrude a 9 mm-side triangular bead on the area to be glued. Immediately install the windscreen. It can be centered for about 10 minutes and then it must be fixed into position.

Wait at least 4 hours before using the vehicle.

DRYING TIMES

- Skin formation time (23°C, 50% r.h.): 10-20 minutes
- Curing rate (23°C, 50% r.h.): 3,0 mm after 24 hours
- Drive-away time (23°C, 50% r.h.): 4 h

STORAGE

Store the product in a dry place, protected from direct sunlight, at temperatures between 5°C and 35°C.

The effectiveness of our products is based on practical experiences and research work carried out in our laboratories; nevertheless we accept no liability for work carried out following our instructions being clear that the final result depends in all cases on a series of unforeseeable factors.

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