MS SCREEN BOND HD

DESCRIPTION

MS Polymer based adhesive with a very high initial strength. For bonding windscreens to heavy duty vehicles (buses, trucks, trains, boats, tractors, construction vehicles, caravans, etc.) Safe drive away time after 1 h.

PROPERTIES

- Safe drive away time with double airbags 1h. Tested according to FMVSS 212 Windshield mounting by TÜV Süd.
- The very high initial tack reduces clamping time and can even exclude it.
- Free from isocyanates, PVC and solvents.
- Very good UV-resistance and ageing properties.
- Good adhesion on several substrates without the use of a primer.
- Low conductivity reducing interference on GPS, radio, mobile phone and other integrated components in the screen.
- Permanent elastic within temperatures from –40°C till +100°C.
- Neutral, odourless and fast curing.
- Paintable after skin forming (wet on wet); without influencing the curing speed.
- Paintable with most paint systems when the surface is dry after approximately 10 minutes.
- Makes windscreen installations simpler, quicker, safer and more efficient than traditional PU products.

FIELD OF APPLICATION

- Provides an elastic adhesive and sealing joint, that is ideal for assembly of glass for various vehicles.
- Elastic bonding and sealing in e.g. heavy-duty vehicles, bus-, train-, caravan-, camper and truck construction.
- General bonding applications where a very high initial strength and fast strength build up is required.
- Can be extruded with a hand or air pressure gun at temperatures between +5°C and 35°C.

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USER INSTRUCTIONS

1. Can be applied with a hand-held, battery-operated or air-operated gun. Recommended pressure in air gun is 3-4 bars.
2. Application temperature from +5°C to 35°C.
3. V-nozzle is recommended and always follow vehicle manufacturer information about width and height of the bead, when used for windscreen replacement.
4. In bonding applications, the substrates must be assembled within 15 minutes (at 20°C/50% RH[1]) after applying MS Screen Bond HD. The higher the temperature, the shorter the open time will be.
5. In sealing applications MS Screen Bond HD should be tooled or smoothened within 10 minutes (at 20°C/50% RH) with a spatula or putty knife, occasionally moistened with a soap solution. Avoid soap solution penetrating between joint sides and sealant, because this will create loss of adhesion.
6. Used as a general adhesive a thickness of 2 mm is recommended if similar materials (similar stiffness) are bonded. The larger the difference in thermal expansion is, the thicker the adhesive bead should be.
7. At 20°C and 50% RH MS Screen Bond HD can be painted with the most industrial paints already 10 minutes after application. Best adhesion of paint coats is generally obtained if painted within 4 hours after application.

[1] RH – Relative Humidity; 50% is ca. 9 g water/1m^3

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TECHNICAL DETAILS

Packaging:	290 ml PE cartridge. Art.no. 15456-2 600 ml sausage. Art.no. 15458-1.
Color:	Black
Odor:	Mild
Basis:	MS-Polymer
Curing system:	Moisture
Skin formation time at 20˚C/50% RH:	~10 min.
Open time at 20°C/50% RH:	<15 min.
Curing speed ≥ 24h at 20˚C/50% RH:	3,5 mm
Volume change (DIN 52451):	<3 %
Elastic recovery:	≥70%
Elongation at break (DIN 53504/ISO 37):	300%
Shear strength (DIN 53283/ASTM D 1002):	2,50 N/mm^2
Tensile strength at 100% (DIN 53504/ISO 37):	1,70 N/mm^2
Tensile strength at break (DIN 53504/ISO 37):	3,30 N/mm^2
Tear strength (DIN 53515/ISO 34):	15 N/mm
E-Modulus 5-10% (DIN 53515/ISO 34):	5 N/mm^2
G-modulus:	2,0 MPa
Initial strength at 20˚C/50% RH:	3.000 Pa
Strength 1h at 20˚C/50% RH:	12.000 Pa
Hardness Shore A (DIN 53505):	58
Application & Surface temperature:	+5°C to +35°C
Temperature resist:	-40°C to +100°C (200°C max 10min).
Specific Density:	1,40 g/cm^3
VOC (directive 2010/75 EG):	0 % (0 g/l)
Shelf life unopened (+5°C to +30 °C):	18 months (cartridge). 15 months (sausage)
Accessories:	V-nozzle cartridge: Art.no. 15472-1 V-nozzle sausage: Art.no. 15452 Alu Gun: Art.no. 15264
Miscellaneous:	In compliance with the legal regulations, please see current Material Safety Data Sheet. https://veidec.com/en/msds
User instructions:	Scan the QR-code for MSDS, video and other information.

VEIDEC FEATURES

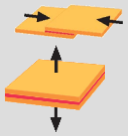
GREEN LINE
Our premium product range with focus on the environment and health as well as quality

CERTIFICATES & REGISTRATIONS

Registered at BASTA:

Crash tested according to FMVSS212 – 1 h drive away

TECHNICAL FEATURES

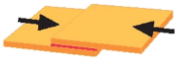


Shear strength:
2,50 N/mm^2

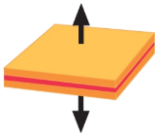
Tensile strength at break
3,30 N/mm^2

MS SCREEN BOND HD

Adhesive strength



Shear strength buildup		
Time - h	**MPa**	**Kg**
0	0,003	49
1	0,012	196
6	0,35	5 700
24	1,13	18 500
48	1,59	25 900
72	2,07	33 800
168	2,22	36 200
336	2,5	40 800



MPa	Kg
Tensile strength	
1,7	27 700
E-modulus	
5	81 600

The examples are calculated for a windscreen of 2,5x1,5 m and bead width of 20 mm = total adhesion surface of 0,16 m^2. At conditions 20˚C/50% RH.

Note! These data shall only be used as information for fixation time and not when the vehicle can be returned to service. These data are produced at 20°C and 50% RH. A lower RH value will lower the strength buildup (slower and less strong). At humidity ≤20 RH the curing time and strength buildup is very low and can even stop. Humidity ≥50% at 20°C accelerate the curing time and strength buildup by 40% and more. Moister can be applied directly on the bead to accelerate curing time but if water gets between the surfaces loss of adhesion will be an unwanted effect. These data are valid regardless of if the adhesives are used on old MS, PU or hybrids.