

BLACK MAMBA FHG

MS60 CONSTRUCTION

Black Mamba FHG Construction is made of mono component MS polymer adhesives. This adhesive reacts with the humidity in the air and offers optimal sealing even under pressure. The main advantage of this product is the speed at which skin can form as well as the curing speed in which 100% of the material is active. It is recommended to use this product in temperatures varying between -40 and 140°C but optimal qualities are achieved between 5 and 35°C. Shrinkage is at 1% and the elongation at break can go up to 400% which enables it to resist to impacts, vibrations and peeling. It is resistant to water, UV exposure, yellowing and aggressive environments such as alkaline, diluted acids, polar solvents, oils and more.

Product Characteristics

- Easy to apply by manual or compressed air gun extrusion
- Polymerization at room temperature.
- Joints: Adhesive applied within 10mins with spatula at 20°C & 50% R.H.
- Bonding: Substrate applied within 15mins at 20°C & 50% R.H.
- Does not need primer

Range of application

Black Mamba FHG Construction is recommended for the following substrates:

- Metal aluminum, steel and other alloys
- Technical plastics ABS, PMMA, PVC and more
- Glass and laminated glass
- Composites
- Powdered paint applications

Colours ■ Grey opaque ■ Black opaque ○ White opaque

Surface Preparation

Use Black Mamba FHG cleaner* to remove grease, loose contamination or poorly adhering oxides from metal surfaces. Most plastics require a simple cleaning before bonding. Some may require sanding for better performance.

* Black Mamba FHG cleaner is an all-purpose surface cleaner





ADHESIVE PROPERTIES

Tensile Strength at break [Mpa]

Physical Properties

| 0 [1] | |
|----------------------------------|-------------|
| Hardness [Shore A] | 30 |
| Elongation at break ¹ | 300% |
| Liquid Properties | |
| Specific gravity @ 20°C [g/ cm³] | 1.35 - 1.37 |
| Viscosity @ 25°C (Pa.s) | 50- 70 |

1.1

Curing Properties

| Skin formation time [min] @ 20°C & 50% R.H. | 30 -60 |
|---|------------|
| Cure Speed [mm/24h] @ 20°C & 50% R.H. | 5 |
| Temperature Range [°C] | -40 to 140 |

Lap Shear Strength (MPa)³

| Aluminium | 1.6 CF ⁴ |
|-----------------|---------------------|
| Stainless Steel | 1.7 CF ⁴ |
| Steel | 1.8 CF ⁴ |

Notes:

- 1.ISO 527-1A
- 2. Rheometer
- 3. NF EN 1465
- 4. CF: Cohesive Failure

Packaging



290ml cartridges



590ml or 5kg sausages



200L drums

Storage

Shelf life is 12 months in unopened original packaging. The product may be stored in a closed container in a dry place at temperature between 15°C and 25°C.

Exposure to temperatures

exposure to temperatures outside this range will result in a reduction of the stated shelf life.

Application

An optimal application can be obtained at room temperature, between 5°C and 35°C without postcuring.

Precautions

While the product does not emit any odour, it is recommended to use the product in a well-ventilated area. This product is dangerous if ingested.

Please read the **Material Safety Data Sheet** before handling or using this product.

Limited Warranty

MPI-Matco can make no warranty of any kind as to the results of the adhesive product use. The information published here is representative of laboratory research on these products and is believed to be reliable. Values should not be used for specification purposes. Each user should make their own test to determine the product suitability for their own intended use and shall assume all risks and liabilities in connection therewith.