PRODUCT DATA SHEET

Casco® SuperSet

Moisture curing assembly mastic with elastic properties and excellent adhesion to most materials.

DESCRIPTION

Moisture curing assembly mastic with elastic properties and excellent adhesion to most materials.
The unevenness in the joint can be several millimetres.

USES

The elastic properties combine the ability to distribute forces, take up vibrations and hold large forces without tendency for cold flow.
Does not affect foamed polystyrene negatively.

CHARACTERISTICS / ADVANTAGES

- High thixotropic and easy to apply
- Tough joint and high strength
- Excellent chemical resistant
- Very high ageing properties and temperature resistance
- No shrinkage and extremely good joint filling properties
- Environmentally favourable with regard to working and indoor environment as well as waste handling and life cycle aspects.

SUSTAINABILITY

For the product's assessment in the different building criteria systems, see MiljöAppen.

Here you will also find information about EC1, M1, link to the building product declaration, safety data sheets etc. The MiljöAppen, can also be reached by entering www.sikamiljoapp.se in your web browser.

PRODUCT INFORMATION

Composition	SMP (silylated modified polymer)
Packaging	300 ml cartridge
Shelf life	12 months in unopened cartridge storage
Storage conditions	May not be exposed to temperature below +10 °C or above +30 °C
Colour	White
Density	~1500 kg/m³
Solid content by mass	~100 %
Consistency	Gun-grade thixotropic paste
Volatile organic compound (VOC) content	None

TECHNICAL INFORMATION

Shore A hardness	60-65 Shore A
Tensile strength	2.3 N/mm²
Tensile strain at break	250 %
Tear propagation resistance	Tear strength (ASTM D 624): 9 N/mm
Chemical resistance	Casco® SuperSet has very good resistance to many chemicals, for example water, rapeseed oil, naphtha, ketones, diesel oil, motor oil, sodium hypochlorite, diluted bases and acids.

APPLICATION INFORMATION

Material temperature	+5°C - +40°C
Relative air humidity	Minimum 30 % RH
Open Time	Approx. 20 minutes (23°C/50%RH)
Curing time	3 mm the first 24 h. ~10 mm after 7 days.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LIMITATIONS OF USE

Casco® SuperSet is moisture curing.
The access of moisture to the adhesive to be cured is essential. Cold and dry surroundings will slow the cure significantly.
When gluing watertight surfaces, moisture access must be secured. A combination of watertight surfaces and dry conditions can give an unacceptably slow cure.
Adhesion problems can also occur because of lack of moisture. If cure time is important, always pre-test the design under the worst conditions anticipated.
Overpainting works well with many paint products. Pretesting of drying and adhesion of the paint is always recommended. The adhesive is elastic and can flex a little over the joint. This will lead to cracking of most types of paint. If Superfix is used as a sealant, these cracks can in worst case cause cracking of the joint.
If Casco® SuperSet is used together with polyurethane systems, note the following:
Casco® SuperSet releases alcohol during cure, which can affect the curing of the polyurethane adversely. The polyurethane probably consumes water during cure. If access to water is limited, this can affect the cure and adhesion of Casco® SuperSet. It is no problem to use Casco® SuperSet in combination with polyurethanes, if the product applied first is allowed to cure fully before the second product is applied.
Casco® SuperSet don't bond Polyethylene, Polypropylene, Teflon, and other greasy plastics.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

DIRECTIONS FOR USE

The joint interface must be clean, dry, and free from oils, loose aggregates, and other contaminants.
A thorough wire brushing, grinding or solvent cleaning may be required to expose clean, sound surfaces.
Apply the adhesive to strings or dots. Thicker strings/dots are used if the surfaces are uneven. Never apply continuous film if two non-porous materials with large surfaces are glued. String or dot gluing will allow the moisture necessary for curing to pass to the center of the joint.
Assemble the parts before skin has formed (approx. 20 minutes at room temperature, shorter time at higher temps.)
A fixation may be needed in some cases, until the cure is completed. The joint is possible to handle after 1 to 24 hours, depending on materials glued, temperature and joint thickness.
See below table for recommendation of pre-treatment on varied materials.

METAL	GLASS	WOOD
Superset bonds without primer on metal surfaces such as aluminium, zinc, galvanised steel, stainless steel, brass etc. In general, there is also good adhesion to painted and coated metals. It does not bond to lead	Superset bonds to glass without primer. For outdoor glass constructions with high UV-exposure on the bond line through the glass, Superfix/Superset is not recommended.	The adhesion is good for most woods, assuming the surface is freshly sanded. Pre-test on especially “fat” woods are recommended.

PLASTICS	POROUS SUBSTRATES	
Superset bonds to un-plasticized PVC, polyester, epoxy, polyurethane, melamine, etc. Pre-testing is recommended on acrylic, ABS, styrene, polycarbonate and plasticized PVC. There is no adhesion to untreated polyolefin. The adhesion to polyethylene, polypropylene and fluorinated plastics is low.	With an elastic adhesive it is always harder to get adhesion to porous substrates. Always consider a coating if the substrate is too weak, preferable to pre-test. The adhesion to wet concrete might be poor. If in doubt, contact technical service. Adhesion to most natural stones is good.	

It is recommended to do pre-tests.

QUICK CURE

The cure speed can be increased by blending moisture in the product. This can be useful in industrial processes.
A solvent miscible with both water and Superset is chosen. Ethyl alcohol is a possible choice.
The joint will have an initial cure after 15 minutes or less, sufficient to handle the assembly. The full cure will be completed as normal, by diffusing moisture.
This method can be altered with other solvents and amounts added, to give longer pot life or better initial cure. Contact R&D Sealants for support.

APPLICATION METHOD / TOOLS

Sealant gun

CLEANING OF EQUIPMENT

Remove all excess sealant adjacent to joint and on equipment prior to cure with a rag. White spirit or technical ethanol is used if necessary.
Seal Remover 3987 is recommended if the adhesive has cured, otherwise cured adhesive is removed mechanically.
On skin, uncured sealant is wiped off with a rag, then wash with soap and water.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

LEGAL NOTES

Sika Sverige AB
Domnarvsgatan 15
Box 8061
SE- 163 08 Spånga Sweden
TEL: +46 8 621 89 00
info@se.sika.com
www.casco.eu