PRODUCT DATA SHEET

Casco® MultiTech

Elastic multipurpose sealant adhesive and filler

DESCRIPTION

Casco® MultiTech is a 1-part, flexible, multipurpose sealant, adhesive and filler. It has a broad application range and good adhesion to many substrates.

USES

The product can be used for airtight and watertight sealing, bonding and filling applications in or around buildings such as:

- Floors
- Walls
- Doors
- Windows
- Roofs
- Wet rooms
- Kitchens
- Utility rooms

The product can be used on various substrates. Refer to 'Substrate Preparation' section for compatible substrates.
The product can be used as an adhesive and sealant on non-commercial leisure boats.
The product can be used for interior and exterior applications.

The product is not suitable for the following applications:

- Sealing joints in and around swimming pools
- Joints under water pressure
- Permanent water immersion
- Bonding and sealing of glass if the bond line is exposed to sunlight
- Structural bonding

CHARACTERISTICS / ADVANTAGES

- Good mechanical properties
- Good weathering resistance
- Easy to apply
- Easy to tool
- High elasticity
- Movement capability ± 20 %
- Free of isocyanates, phthalates and tin
- Very low emissions
- Over-paintable
- Resistant to fresh water, salt water and temporary exposure to diluted caustic and acid solutions

SUSTAINABILITY

- Conformity with LEED v4 EQc 2: Low-Emitting Materials
- VOC emission classification GEV-Emicode EC1PLUS, license number 12553/20.10.00
- VOC Emission Attestation M1 Casco® MultiTech, eurofins

APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance to EN 15651-1 - Sealants for facade elements F EXT-INT CC 20HM
- CE Marking and Declaration of Performance to EN 15651-3 - Sealants for sanitary joints S XS3
- CE Marking and Declaration of Performance to EN 15651-4 - Sealants for pedestrian walkways PW INT 20HM
- Food Industry Approval, Casco® MultiTech, ISEGA, Certificate No. 53634 U 20

PRODUCT INFORMATION

Composition	Silane terminated polymer	
Packaging	300 ml cartridges: 6 or 12 cartridges per box depending on colour	
Shelf life	12 months from the date of production	
Storage conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +25 °C. Always refer to packaging.	
Colour	Black, white, grey, exotic, light oak Please contact our customer service, for information of which colors are sold in Denmark.	
Density	~1,45 kg/l	(ISO 1183-1)

TECHNICAL INFORMATION

Shore A hardness	~48 (after 28 days)	(ISO 868)
Tensile strength	~2,0 N/mm²	(ISO 37d)
Secant tensile modulus	~0,9 N/mm² at 60 % elongation (+23 °C)	(ISO 8339)
Tensile strain at break	~550 %	(ISO 37)
Movement capability	± 20 %	(ISO 9047)
Elastic recovery	~80 %	(ISO 7389)
Tear propagation resistance	~13 N/mm	(ISO 34)
Service temperature	–50 °C min. / +90 °C max.	
Joint design	▪ The joint dimensions must be designed to suit the movement capability of the sealant. The joint width must be a minimum of 6 mm and a maximum of 30 mm. ▪ A width to depth ratio of 2:1 must be maintained for movement joints. ▪ Joint widths less than 10 mm are generally for crack control and therefore considered as non-movement joints (static).	

APPLICATION INFORMATION

Sag flow	0 mm (20 mm profile, +23 °C)	(ISO 7390)
Ambient air temperature	+5 °C min. / +40 °C max.	
Substrate temperature	+5 °C min. / +40 °C max. Minimum +3 °C above dew point temperature	
Backing material	Use closed cell, polyethylene foam backing rod	
Curing rate	~3 mm / 24 hours (+23 °C / 50 % r.h.) *Sika Corporate Quality Procedure Note: Final strength will be reached after complete curing, i.e. after 24 to 48 hours at +23 °C, depending on the environmental conditions and adhesive layer thickness.	(CQP* 049-2)
Skinning time	~45 minutes (+23 °C / 50 % r.h.)	(CQP 019-1)

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.

IMPORTANT CONSIDERATIONS

- Casco® MultiTech can be over-painted with most conventional facade paint coating systems. However, paints must first be tested to ensure compatibility by carrying out preliminary trials (e.g. according to ISO technical paper: Paintability and Paint Compatibility of Sealants). Optimum results are obtained when the sealant is allowed to fully cure first.
  Note: non-flexible paint systems may impair the elasticity of the sealant and lead to cracking of the paint coating. Depending on type of paint used, plasticiser migration may occur causing the paint to become surface 'tacky'.
- For good workability, the adhesive temperature must be +20 °C.
- Application during high temperature changes is not recommended (movement during curing).
- Casco® MultiTech can be overpainted with most conventional water-based coating and paint systems. However, paints must first be tested to ensure compatibility by carrying out preliminary trials. The best over-painting results are obtained when the adhesive is allowed to fully cure first. Note: non-flexible paint systems may impair the elasticity of the adhesive and lead to cracking of the paint film.
- Colour variations may occur due to the exposure in service to chemicals, high temperatures and/or UV-radiation (especially with white colour shade). This effect is aesthetic and does not adversely influence the technical performance or durability of the product.
- Always use the product in conjunction with mechanical fixings for overhead applications or heavy items.
- For very heavy components provide temporary support until the product has fully cured.
- Full surface applications / fixings are not recommended since the inner part of the adhesive layer may never reach full cure.
- Do not use on natural rubber, EPDM rubber or on any building materials which might leach oils, plasticisers or solvents that could degrade the adhesive.
- Do not use on bituminous substrates.
- Do not use on polyethylene (PE), polypropylene (PP), polytetrafluoroethylene (PTFE / Teflon), and certain plasticised synthetic materials.
- Do not expose the uncured Product to alcohol containing products as this may interfere with the curing reaction.

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

SUBSTRATE PREPARATION

Note:Primers are adhesion promoters and not an alternative to improve poor preparation / cleaning of joint surfaces. Primers also improve the long-term adhesion performance of a sealed joint.

- The substrate must be sound, clean, dry and free of all contaminants such as dirt, oil, grease, cement laitance, old sealants and poorly bonded paint coatings which could affect adhesion of the adhesive / sealant.
- The substrate should be of sufficient strength to resist with the stresses induced by the sealant during movement.
- Use wire brushing, abrading or grinding equipment to prepare the surface.
- All dust, loose and friable material must be completely removed from all surfaces before application of any activators, primers or adhesive / sealant.
- Casco® MultiTech adheres without primers and/or activators. However, for optimum adhesion, joint durability and critical, high performance applications the following priming and/or pre-treatment procedures must be followed:

Non-porous compatible substrates
Aluminium, anodised aluminium, galvanised steel, glass, glass fibre composites, glazed tiles, mirrors, powder coated metals, PVC, stainless steel.

1. Lightly roughen the substrate with a fine abrasive pad.
2. Clean and pre-treat using Casco® Activator 22 applied with a clean cloth.
3. Before bonding / sealing, allow a waiting time of > 15 minutes (< 6 hours).

Porous compatible substrates
Concrete, aerated concrete and cement-based renders, mortar, brick, wood.

1. Prime the substrate using Casco® Primer 21 applied by brush.
2. Before bonding / sealing, allow a waiting time of > 30 minutes (< 8 hours).

MIXING

1-part ready to use

APPLICATION METHOD / TOOLS

Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.
Note: Allow the primer or pre-treatment product, if applied, to achieve the required waiting time before bonding / sealing.

Bonding procedure
Note:Incorrectly positioned components can easily be unbonded and repositioned during the first few minutes after application. If necessary, use temporary adhesive tapes, wedges, or supports to hold the assembled components together during the initial curing time.

1. Cut the top off the cartridge before or after inserting into the sealant gun.
2. Fit the nozzle onto the cartridge.
3. Cut the nozzle to the required bead size.
4. Apply in beads, strips or spots at intervals of a few centimetres each.
5. Position and bond the components together using hand pressure only before skinning of the adhesive occurs.
6. Remove fresh, uncured adhesive remaining on the surface immediately.

Sealing Procedure
Masking
It is recommended to use masking tape where neat or exact joint lines are required. Remove the tape within the skin time after finishing.

Joint Backing
After the required substrate preparation, insert a suitable backing rod to the required depth.

Pre-treatment
Pre-treat the joint surfaces as recommended in substrate preparation. Avoid excessive application of primer to avoid causing puddles at the base of the joint.

Application
1. Cut the top off the cartridge before or after inserting into the sealant gun.
2. Fit the nozzle onto the cartridge.
3. Cut the nozzle to the required bead size.
4. Extrude the product into the joint ensuring that it comes into full contact with the sides of the joint and avoiding any air entrapment.

Finishing
Note: Do not use tooling products containing solvents.

- As soon as possible after application, firmly tool the sealant against the joint sides to ensure adequate adhesion and a smooth finish.
- Use a compatible tooling agent to smooth the joint surface.

CLEANING OF EQUIPMENT

Clean all tools and application equipment immediately after use with Casco® Seal Remover. Hardened material can only be removed mechanically.
For cleaning skin use Casco® Brutal Wipes.

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

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