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| CI/SfB | | Yt4 |
| CAW P22 | | |
| Uniclass L675:P743 | | |

Technical Data Sheet

SG301

SILICONE SEALANT

TREMCO
Lasting Performance



KEY BENEFITS SUMMARY

- Exceptional weather resistance: including UV and ozone exposure with an anticipated life of 30 years
- Movement capability: 25%
- No priming: Good adhesion without primer to most common substrates
- High adhesion strength: Suited for bonding applications
- Excellent gunnability: Through wide temperature range
- Stable curing system: Which assures product reliability
- Quick skin formation

PRODUCT INFORMATION

Description

- SG301 is a versatile, high performance silicone sealant which reacts with atmospheric moisture to produce a flexible silicone rubber, ideal for a wide variety of general purpose joint sealing and glazing applications.
- SG301 provides exceptional cure stability.
- Capable of taking extension, compression, transverse and longitudinal movements, SG301 resists severe environmental conditions such as wind loading, wind driven rain, snow and sleet, and is impervious to acid rain, ozone, ultraviolet light and extreme temperature variations.
- Because of its excellent adhesive qualities, SG301 provides the long-term performance required for demanding weatherproofing applications.
- SG301 is recommended for use on both new construction and renovation projects.

Area of Use

The high modulus and outstanding physical properties of SG301 allow for sealing a wide variety of demanding applications, such as:

- Curtain walling, included cap, toe, heel and air seals
- General sealing/jointing
- Silicone structural glazing in 2-sided systems
- A weather seal in butt (2-sided) and stopless (4-sided) glazing systems.
- Joint within curtain/window systems

Limitations

SG301 is NOT recommended for:

- Permanent immersion
- Use on materials where migration of constituents can take place (e.g. certain rubbers)
- On applications over tars, asphalt or materials that bleed oil, plasticisers or solvents

- Use where abrasion or physical abuse will be encountered (e.g. trafficable joints)
- Over painting
- In exterior below ground applications
- In horizontal traffic joints
- In applications in airtight enclosures as the sealant requires atmospheric moisture to cure
- On sensitive substrates (e.g. marble, architectural stones, etc.) without prior testing for staining

Note: where staining is a problem, we recommend the use of high performance silicone FA870 or FA880 if suitable for the application in question.

Packaging

310 ml cartridge (12 per case)
600 ml sausages (20 per case)

Colour

Black

Storage

In dry conditions between + 5°C and +25°C

Shelf Life

In all unopened packaging: 12 months

Joint Design Realisation

- Joint design to be in accordance with ISO 11600 and BS 6093
- For the purpose of joint width calculation in BS 6093 the MAF of SG301 is 25%
- Width to depth ratio should be 2:1 subject to a minimum depth of 10mm on porous substrates and 6mm on non-porous substrates.
- Sealant width not be less than sealant depth.
- For fillet joints the minimum bite should be 10mm for porous substrates and 6mm for non-porous substrates.

Surface Preparation:

- Loose friable material must be removed and arisess made good.
- Joint faces should be clean of dust and free from substances likely to impair adhesion.
- Metal surfaces should be decreased with solvent.

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Priming

- SG301 does not require primer on most common substrates; however, some materials such as milled aluminium or surfaces with special characteristics, finishes or coatings (e.g. porous stones), may require a primer.
- Details of special substrates should be submitted to CPG UK technical services department.
- A site adhesion trial is recommended to ensure substrates compatibility before commencement of main installation.

Method of Application

- Application should be in accordance with BS 8000:16 - "Code of practice for sealing joints in buildings using sealants."
- All beads should be tooled immediately after application to ensure firm, full contact with join face.
- Use a conventional skeleton gun.

Coverage Rate

- To determine quantity of sealant required calculate as follows:

$$\frac{\text{Gap Width} \times \text{Depth} \times \text{Total Length}}{310} = \text{N}^{\circ} \text{ of cartridges}$$

For further guidance on application methods, and material requirements, please contact CPG UK Technical Services Department.

Cleaning

Cleaning of all tools can be accomplished with solvents such as Isopropanol or Methyl Ethyl Ketone (MEK).

Immediately remove all excess sealant and smear adjacent to the joint with one of above mentioned solvents (use masking tape where appropriate).

Cured sealant can only be removed by abrasion.

Compliance and Approvals

- SG301 meets the requirements of EN ISO 11600 G&F 25HM. (External & Internal)
- The product is compliant with EN 15651-1 and EN 15651-2.
- The product has the CE marking.

TECHNICAL DATA

| PROPERTY | TEST METHOD | RESULT (Typical Values) |
|----------------------------|--------------------------------|-------------------------|
| Composition | | Neutral Silicone |
| Colour | | Black |
| Density* | EN ISO 7390 20mm | 1.38 |
| Skin Formation | at 23°C, 50% RH | 8 - 10 minutes |
| Tack Free Time | at 23°C, 50% RH | < 2 hours |
| Cure Rate | 1mm/1st Day at at 23°C, 50% RH | 7-14 days 6 mm |
| Sag | | 0 mm |
| Tensile Strength* | DIN 53 504 S2 | 1.7 MPa |
| | DIN 53 504 Method A | 1.0 MPa approx. |
| Ultimate Elongation* | DIN 53 504 S2 | 380 % |
| | EN ISO 8339 | approx. 200% |
| Modulus at 100% Elongation | EN ISO 8339 | 0.8 - 1.0 MPa |
| Movement Capability | EN ISO 11600 | 25% |
| Hardness (Shore A)* | EN ISO 868 | 40 |
| Application Temperature | | +5°C to +40°C |

*Typical values

Safety Precautions

Safety data sheet must be read and understood before use.

Technical Service

CPG UK has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

Guarantee / Warranty

CPG UK products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with tremco illbruck written instructions and (b) in any application recommended by tremco illbruck, but which is proved to be defective, will be replaced free of charge.

No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

Note

The information in this document is provided for informational purposes and are non-binding. Technical data are not expressly warranted characteristics of the goods.

Because of the variety of material used, the variety of application processes and the variety of conditions of use are beyond our control, preliminary tests are strongly recommended before any order.

The manufacturer reserves the right of modifying the technical characteristics of its products at any time.

The warranty policy of these products is exclusively governed by our general terms and conditions of sales.

CPG UK can not be held liable based on the general information given by this document.