# COSHH Product data sheet for Silicon Rubber Sealant

## *High Modulus Silicon Sealant General Information / Description*

1) Application: Jointing in glass wall assemblies.

2) General: A one part gun applied sealant which cures rapidly on exposure to air to provide a seal of resilient silicon rubber.

3) Specification Compliance: To British Standard 5889: 1989 Type B.US Federal TT-S-001543A Class A. and Translucent is approved by the National Water Council for use with potable water.

4) Installation: Follow instructions supplied with product.

5) Joint Size: Good joint design is important in obtaining the highest degree of performance from the sealant. Design joint width should be not less than four and a half times total expected movement. for optimum movement accommodation it isrecommended that:

a) Joint depth should not be less than 5mm.

b) Joint depth should be 5mm up to a joint width of 10mm.

c) Joints above 10mm in width should be half the width in the depth up to 20mm and minimum 10mm for wider joints.

When used to form an exterior weather seal in a glazed application, rebate and glass dimension should conform to British Standard 6262 'Glazing for Buildings'. The face clearance should be a minimum of 3mm and the minimum depth of the sealant 5mm.The sealant should be chamfered to provide a finish which will shed water.

6) Colour: Translucent.
7) Storage: Twelve months storage life in original unopened package stored in a cooldry place out of direct sunlight.

## *Working Characteristics Of Product & Performance During Service Life*

1) Form: Paste.
2) Flash Point: Not Applicable.
3) Tensile Strength: Exceeds 1.00Mn/m2.
4) Physical or Chemical Change After Application: Chemical Cure.
5) Application Temperature Range: Minus 20oC to plus 50oC. Whilst the silicon can be applied at sub zero temperatures, joint surfaces must be free from frost. At outdoor temperatures of 5oC and below, an almost invisible film of moisture may form which can cause adhesion problems. In such conditions it is desirable to warm the joint surface to ensure freedom from the moisture film. If warming is necessary, this should be done before the primer, if any, is applied.
6) Cure Time: The sealant forms a surface skin within five (5) minutes and is tack free after one hour. Section up to 10mm depth are normally fully cured after, on average, seven days dependant on the surface area exposed and the temperature / humidity. The sealant gives off a vinegary smell of acetic acid during the curing cycle but this odour disappears when the cure is completed. Acetic acid is a corrosive substance and may promote rusting or corrosion of some metal surfaces ie. mild steel, copper, lead etc., and may adversely affect surfaces such as concrete, limestone, marble etc.
7) Service Temperature Range: Minus 60oC to plus 200oC.
8) Flammability: The cured sealant does not support combustion. It will burn when subjected to intense heat, but will cease burning when the heat is removed.
9) Chemical Resistance: Excellent to attack by dilute acids and alkalis in normal building practices and heavy industrialised areas.
10) 10UV Resistance: Excellent.
11) Hardness: 18 Shore A approximately.
12) Chemical Resistance: Resistant to most dilute acids and alkalis with little change in properties. Organic solvents may cause the seal to swell and lose adhesion, butdo not directly dissolve the material.
13) Water Immersion: Is suitable for joints continually immersed in either fresh or sea water, provided that the joint preparation, priming and application are of the highest order. Prior consultation with the Technical Department is recommended.
14) Staining: The sealant will not cause staining on porous surfaces when used in accordance with recommendations. Pattern staining may however occur with all silicone sealants due to dirt and dust washed onto or around the joint.
15) Movement Accommodation Factor: This is the design figure for the total movement affecting a joint and takes into account that the joint may not be formed or sealed at the normal position. Where movement is in one direction only it should not exceed two thirds of the movement accommodation factor. Use in butt joints (movement in tension and

compression) 30%. Use in lap joints (movement in shear) 75%.The sealant is recommended for use in applications where it will be subject only to short period cyclic movement. Its use is not advised in joints subject to long period deformation.

16) Durability: Anticipated life excess of 25 years.
17) Maintenance: Correctly applied the sealant should not require maintenance during itsservice life. Damaged sealant may be replaced by cutting out the affected area, cleaning the surface, priming and applying fresh sealant as in the original specification.

## *Health and Safety*

*1)* Skin contact: Avoid prolonged contact. Wash off with soap and water before the material dries.
*2)* Eye contact: Irrigate with clean water for at least 10 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.
*3)* Inhalation: Use in ventilated areas.