



Silicones for Photovoltaics

Adhesives

Encapsulants

Thermal Transfer

Junction Box Potting

***World Class Silicones
for Worldwide Solutions***



Encapsulation Compounds

EVA has long been the preferred choice for PV Module encapsulation. However advances in silicone technology now offer improved performance, faster cure times, better environmental protection and a cost effective alternative. Advances in multi lens CPV technology are reaping the benefits of improved light transmission through the use of optically clear silicone encapsulants.

Products available include:

- Optically Clear Elastomers
- RTV and Heat Accelerated
- Optically Clear Silicone Gels
- UV Stability

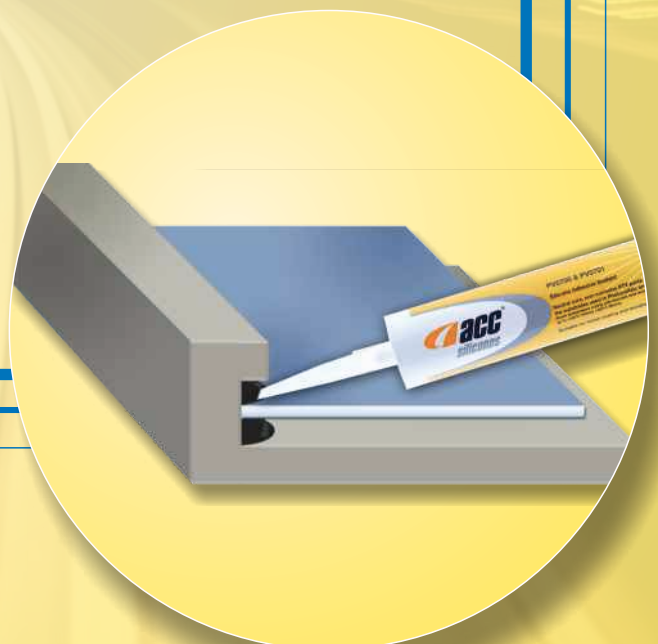


Silicone Adhesives

PV Modules are subjected to harsh environmental conditions and extreme thermal cycles. The materials used have widely different coefficients of expansion, therefore a frame sealant and junction box adhesive must withstand these temperature changes and maintain adhesion and flexibility. The ACC Silicones PV grade neutral cure silicone adhesive sealants have been formulated to meet these demanding conditions. There is a choice of cure systems to allow for accelerated heat cure or room temperature cure (RTV)

Product features:

- 1-Part RTV's & Heat Cured
- Neutral Cure
- Excellent Adhesion
- Wide temperature range



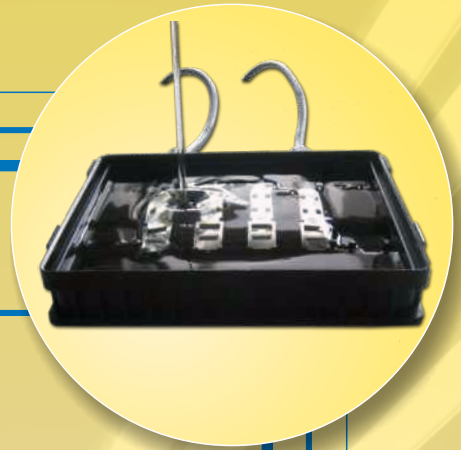
Junction Box Potting

Bias diodes and electrical connections within the junction box need protection and efficient removal of unwanted heat. Within the ACC Silicones range of potting compounds there are materials that will perform various functions:

- Protection from thermal shock
- Environmental protection (moisture)
- Thermal transfer (from bias diodes)

Product properties include:

- UL 94 V-0
- Thermal Transfer
- 1:1 mix ratio
- Soft Gel with UV trace



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ACC Silicones have been manufacturing silicone compounds for over 35 years and has gained an enviable reputation for proven performance and quality with materials being certified for use in the most demanding applications within the aerospace industry. Much of ACC's research work has been focused on Electrical and Electronic applications developing coatings, thermal transfer compounds and non-corrosive sealants. Our customer focused development program and flexible-manufacturing plant enables us to keep pace with the needs of today's modern production methods and design requirements. Qualified, experienced sales and technical staff are readily available to make site visits and advise on product selection and production methods. ACC Silicones group of companies has grown over recent years to include technical research and production facilities in the UK, mainland Europe and the US. Our expertise extends into all areas of 1 and 2-Part RTV silicone chemistry, with a strong bias towards application-based solutions.

Bespoke Production Facilities

Our flexible facilities based upon batch production allow us to offer formulations to meet very specific application requirements. Subject to strict commercial evaluation we are able to chemically engineer our products and change the following properties.

- Rheology: paste to free flowing low viscosity
- Cure speed and tack free times
- Thermal conductivity
- Hardness
- Colour
- Operating temperature range
- Cure mechanism
- Packaging and delivery systems



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