WEIDU WD-836

High Performance Architectural Grade Weatherproof Sealant

TECHNICAL DATASHEET

PRODUCT DESCRIPTION & APPLICATION

WEIDU™ WD-836 is a one component, non-flowing, Neutral cure and medium modulus high performance architectural grade weatherproofing silicone sealant. It cures by absorption of atmospheric moisture to form a flexible and durable elastomeric sealant, particularly suitable for interior and exterior applications, such as external weather seals and expansion joints. It is also suitable for joints on insulating units and glass elements made of laminated and tempered safety glass in factory or field situations.

FEATURES & BENEFITS

- ☑ Odorless and Non-corrosive cure byproduct
- ☑ Designed to allow sufficient time for placement and tooling before skinning.
- ☑ Faster early hour cure properties to facilitate handling of assembled units.
- ☑ Extraordinary adhesion power to glass, aluminium and steel
- ☑ Neutral cure – suitable for use on coated glass, galvanized steel, masonry and other porous and non- porous substrates.
- ☑ Primer less adhesion, Bonds to most conventional substrates and finishes including: glass, glass coatings, ceramic frits, fluoropolymer and powder coated paints, conversion-coated, concrete, masonry, brick, painted & anodized aluminum, terra-cotta, PVC-U, tile, polycarbonate, vinyl, plastics, wood, metal and natural stones.
- ☑ Excellent long-term resistance to natural weathering including: sunlight, rain, snow, ultraviolet radiation, heat and humidity, ozone and temperature extremes.
- ☑ Cures to form an extremely tough elastomeric rubber ensuring a durable, flexible, watertight bond

TYPICAL PROPERTIES – UNCURED

Information on this data sheet can change without notice and it is therefore not recommended that these figures be used in spec writing. If you have any questions contact manufacturer's sales and technical service department.

Properties	Value	Test Method
Appearance	No Grain & No Agglomerations	ISO 11600
Color	Black	
Consistency	Paste	
Chemical base	One-component silicone	
Basis	100% Silicone	
Cure Type	Neutral	
Conforms to	GB/T 14683-F-25HM	
Density at 25°C g/cm3	1.53	ISO 1183
Work Life (Tooling time)	10 minutes	
Tack Free Time	30 minutes	ASTM C679
Sag/Slump	0, Non sag	ISO 7390

TYPICAL PROPERTIES – CURED

Properties	Value	Test Method
Hardness, Shore A	35	ASTM D-2240-97
Ultimate Tensile Strength	0.6 , MPa	ISO 8339
Ultimate Elongation, %	535	ISO 8339
Heat weight loss,%	9.5	ISO 10563
Joint Movement Capability	±25%	ASTM C719
Extrudability, g/min	784	
Service Temperature Range (after cure)	-40°C to +150°C	
Application temperature (ambient)	+5°C to +50°C	
Cure Rate / Day (deep section)	2 mm	
Full Cure (most common bead sizes)	7-14 days	

BASIC USES

WEIDU™ WD-836 is useful as a weatherproofing material when sealing between dissimilar or similar materials in either new or remedial glazing or sealing applications, window perimeters and punched openings.
WEIDU™ WD-836 is useful for sealing to precast concrete, site cast concrete and tilt-up concrete joints.
WEIDU™ WD-836 is useful as a general purpose sealant for seams and curtain wall frames, screw heads, back pans, etc.

CONFORMS, MEETS & EXCEEDS

WEIDU™ WD-836 Weatherproof Silicone Sealant has been internally tested and is designed to meet or exceed the test requirements of: GB/T 14683-F-25HM

METHOD OF APPLICATION

SURFACE PREPARATION

Sealants may not adhere or maintain long-term adhesion to substrates if the surface is not prepared and cleaned properly before sealant application. Using proper materials and following prescribed surface preparation and cleaning procedures is vital for sealant adhesion. Surface preparation Ensure that surfaces to be sealed are clean, dry, sound and grease-free. Isopropyl Alcohol (IPA) is commonly used and has proven useful for most substrates. Xylene and Toluene have also been found useful on many substrates.

CLEANING PROCEDURES

- Use clean, white cloths free of lint or other lint-free wiping materials.
- Do not use detergent to clean the substrate as residue may be left on the surface.
- Clean only as much area as can be sealed in one hour. If cleaned areas are again exposed to rain or contaminants, the surface must be cleaned again.

Note: When using any solvent, always provide adequate ventilation. Avoid heat, sparks and open flames. Use solvent resistant gloves. Observe and follow all precautions listed on solvent container label.

MASKING

Areas adjacent to the joints should be masked with tape to prevent contamination of the substrates and to ensure a neat sealant line. Remove masking immediately after application of silicone or as soon as possible.

PRIMING

Primers are not usually required but might be needed for some specific substrates for maximum adherence. WEIDU™ WD-836 Weatherproof Sealant will bond to many clean surfaces without the aid of a primer. When properly used, primers help assure strong and consistent sealant adhesion to surfaces that may be difficult to bond.
PRIMER APPLICATION IS NOT A SUBSTITUTE FOR SURFACE PREPARATION.

BACK-UP MATERIALS

Where back-up material is required, closed cell polyethylene backer rod is recommended. Back-up materials provide back pressure and avoid three sided adhesion that limits sealant movement capability. Use a closed cell polyethylene-backing rod, 25% larger than the joint width, to control the depth of the joint.

TOOLING AND FINISHING

Tooling and finishing must be carried out within the skin time of the sealant. The joint should be tooled within 5 minutes of application to ensure good contact between the sealant and the substrate. Tooling of the sealant also gives a smooth, professional finish.

CURE TIME

The rate of surface cure and cure-in-depth of most one-part silicone sealants is affected by the temperature, degree of confinement and cross-sectional thickness of the sealant and humidity of the environment. However, an environment of high temperatures in combination with high humidity may slow the surface cure rate of WEIDU™ WD-836. Normal cure time of WEIDU™ WD-836 Weatherproof Sealant is 2mm per day.

CLEAN UP

Excess sealant and smears adjacent to the joint interface can be carefully removed with xylene or mineral spirits before the sealant cures. Any utensils used for tooling can also be cleaned with xylene or mineral spirits. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using a suitable industrial hand cleaner and water. Do not use solvents!

PACKAGING INFORMATION

WEIDU™ WD-836 Weatherproof Sealant is supplied in 590ml sausages packed in boxes of 20.

COVERAGE
300ml cartridge will give approximately 15 lineal meters of a 5mm bead.

COLORS
WEIDU™ WD-166 is available in white color. Other colors under request.

STORAGE & SHELF LIFE
WEIDU™ WD-836 Weatherproof Sealant should be stored in cool and dry conditions. Prolonged storage at high temperatures may affect shelf life and ultimate performance. The shelf life of Weidu® WD-836 is 12 months from the date of manufacture when stored below 25°C and below 50% relative humidity. In countries where high heat and humidity are a factor, special precautions must be taken to store the product in a covered, well-ventilated warehouse and avoid excessive heat conditions.

CAUTION/SAFETY
Please refer to the SDS for the corresponding product for information regarding safety and handling. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The Material Safety Data Sheet is available upon request.

LIMITATIONS
WEIDU™ WD-836 Weatherproof Sealant not be used, applied or is not recommended to the following applications:

- ☒ In food contact applications.
- ☒ In designs where the silicone is encapsulated and without access to atmospheric moisture (this material requires atmospheric moisture to cure from paste to rubber).
- ☒ Under exceedingly hot or cold conditions. Cold temperature and low humidity will slow curing.
- ☒ Underwater or in applications where the product will be in continuous contact with water.
- ☒ For contact with strong acids or bases.
- ☒ Sealant may discolor copper and brass.
- ☒ On bituminous substrates, substrates based on natural rubber, chloroprene or EPDM or on building materials which might bleed oils, plasticizers or solvents.
- ☒ Not for structural glazing

WARRANTY INFORMATION
WEIDU™ warrants that its product complies, within its shelf life, to its specification.
If any responsibility were to be considered ours, this would be only for any damages and for the value of the merchandise supplied by us and used by the customer. It is over understood that we warranty the irreproachable quality of our products in accordance with our General Conditions of Sales and Supply.

LIABILITY
The information in this document, in particular recommendations regarding the application and final use of our products, are given in good faith based on our knowledge and is the result of tests and experience and are intended as guidelines. It is the responsibility of the user to determine whether the product is suitable for the application. Due to the great variety of materials and conditions, which are beyond our knowledge and control, we recommend carrying out sufficient previous trials.
The property rights of third parties must be respected.
This TDS replaces and supersedes all previous data sheets on the same product.

唯度 WEIDU

Manufactured & Imported By
Weidu Adhesives Trading.L.L.C.
P.O.Box: 39942, 2402-SIT Tower,
Silicone Oasis, Dubai, United Arab Emirates
Phone: +971 4 285 3088
Email: weiduadhesives@gmail.com
www.hnweidu.com

ULTRA LOW VOC