

Description

PW 1460 is a one-part UV and moisture dual curing adhesive. It is ideal for bonding, sealing and protection of PCBs and other electrical components.

Features

- Recommended substrates: glass, aluminum, stainless steel
- Secondary moisture cure to address shadowed areas
- Medium hardness and flexible

Uncured Properties

Chemical Type	Modified Acrylate
Appearance	Transparent /Translucent
Viscosity @ 25°C [mPa·s] Brookfield DV2T, spindle 14# @ 20rpm	12,000
Specific Gravity [g/cm³]	~1.1
Work Life @ 25°C [days]	7
Shelf Life @ -40±5°C [months]	6

Curing Conditions

Surface Cure [secs] UVA, 100mW/cm ²	30
Depth of Cure [mm]	3

Cured Properties

Hardness [Shore A] After 30 seconds UV cure	60
Hardness [Shore D] UV + moisture curing @ 50%RH/RT	
After 1 day	35
After 2 days	40
After 3 days	48
After 4 days	56
After 5 days	58
After 6 days	62
After 7 days	65
After 8 days	65
After 9 days	65
ASTM D2240	
Lap shear strength [MPa]	
PCB to PC	>5
ASTM D1002	

Directions for Use

1. Surface Treatment

Surfaces to be bonded should be free of dust, oil, grease or any other contaminants in order to achieve a reproducible bond. Any contamination involving alkaline substances and amines is to be strictly avoided as these can impede curing. For slightly contaminated surfaces, it is sufficient to wipe with isopropanol or ethanol. Substrates with a low surface energy (e.g. polyethylene, polypropylene, Teflon) need to be pre-treated physically (e.g. atmospheric plasma or corona) in order to achieve sufficient adhesion.

2. Application

Products are supplied ready for use. Depending on package type, they can be dosed manually, semi-automatically or fully-automatically with a dosage apparatus. With automatic dispensing using a cartridge, the adhesive is conveyed via pressure and a piston rod to a dispense valve. For bottles, the adhesive is conveyed using a pump.

A variety of valves are available to adjust for desired dosing accuracy and. Please consult our Application Engineering department for recommendations on the dosage amount to be used for your application.

After application, it is recommended that the two substrates be adjoined immediately as it is possible the curing process will begin with select products under ambient conditions.

Storage

Maximum shelf life may be obtained when product is stored in a cool, dry location at a temperature of **-40±5°C**. TO PREVENT CONTAMINATION OF UNUSED PRODUCT, DO NOT RETURN ANY PRODUCT TO ITS ORIGINAL CONTAINER.

Thawing:

1. Do not open the container before the adhesive reaches 25°C. Any moisture condensed on the container during defrosting should be removed before opening.

2. Once the adhesive has reached room temperature, it should not be re-refrigerated. Voids can form in syringes if it is refrigerated repeatedly.
3. Typical thawing time for different package sizes are shown below (products stored at -30±10°C):
 - 1) 25°C, 10 cc syringes, 30 to 60 mins
 - 2) 25°C, 30 cc syringes, 60 to 90 mins
 - 3) 25°C, 55 cc syringes, 2 hrs
 - 4) 25°C, 6 oz cartridges, 3 hrs

Materials Handling

Refer to the Material Safety Data Sheet (MSDS) for this product.

Disclaimer

The information provided here including the recommendations for use and application of the product is based on internal laboratory test conditions and should only be used as a reference. CollTech does not assume responsibility for the test or performance results obtained by the user. It is the responsibility of the user to perform their own evaluations to confirm whether this product is suitable for their application.