# Technical Data Sheet

## PRODUCT SPECIFICATION

# 110-1

### Structural Adhesive

## Description:

This 10:1 impact-toughened acrylic methacrylate adhesive delivers exceptionally high lap shear and peel strengths with enhanced flexibility. Engineered to withstand shock and vibration with minimal surface preparation, it provides superior chemical resistance and is available in varied cure speeds. Typical Applications: Plastics, metals, and modern composites.

## Typical Properties of Cured/Uncured Material:

| Properties | | | |
|---|---|---|---|
| **Base** | Methacrylate | **Elongation At Break (%)** | 100 |
| **Appearance** | Grey | **Max. Gap Fill (mm)** | 15 |
| **Temperature Range (°C)** | -40 to 120 | | |
| **Shelf Life (Months)** | 9 | | |
| **Handling Time (Mins.)** | 10 | | |
| **Working Time (Mins.)** | 5 | | |
| **Mix Ratio** | 10:1 | | |

| | Part A | Part B |
|---|---|---|
| **Viscosity** | 120000 | 100000 |

## Bond Strength:

*(Cured for 24 hours at 20-25°C)*

| Strength | |
|---|---|
| **Tensile Strength (N/mm2)** | 20 |
| **Lap Shear Strength (N/mm2)** | 21 |

## Directions For Use:

1. Always consult SDS before using for the first time.
2. Carry out surface preparation where required.
3. Remove nut, attach mixer nozzle and replace nut.
4. Dispense sufficient adhesive to ensure equal mix and uniform colour.
5. Apply adhesive to one surface and assemble components carefully, clamping if required.
6. It is always easier to remove any excess adhesive prior to cure using a suitable cleaner.
7. Allow the adhesive sufficient time to achieve handling strength before moving or unclamping components.

## Curing Cycle:

At a 1:1 mix ratio, open time depends on temperature, volume, and substrate due to the adhesive's exothermic cure reaction. Higher ambient temperatures and larger mass volumes accelerate curing to reduce working time, whereas lower temperatures and smaller masses extend both open and full cure times.

## Storage:

The product should be stored unopened in suitable hazardous storage conditions for adhesives in a cool, dry location and out of direct sunlight.

## Precaution:

Structural methacrylates should not be used without consulting the SDS, which contains full information regarding the use of this product, including Transport, Disposal, Toxicological, Exposure Controls, Accidental Release and First Aid measures essential to the safe use of this product.

## Disclaimer:

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