# TECHNICAL DATA SHEET

# Hercules – Methacrylate Adhesive

May 2016



### **Product Description**

**Hercules** is a 2- part structural methacrylate adhesive is developed for structural bonding applications that require high tensile, shear and peel strength combined with maximum impact, stress and shock resistance. This adhesive specially formulated to bond over a wide range of varied substrates such as metals, ceramics, glass, ferrites, sintered metals, aluminum, plastics, etc. together or in combination. It offers durability and resistance to water, humidity, solvents, and severe environmental conditions, including temperature extremes and thermal cycling.

### **Typical Application Areas**

- Elevators & Lifts
- DC Motor assembly
- Metal cabinets
- HVAC
- Bonding ferrites to metals
- Loudspeaker assembly
- Transformer
- Signage

### **Specifications**

**Physical Property (Uncured)** 

Item	Value (Part A)	Value (Part B)
Chemical	Methacrylate Monomer	Methacrylate Polymer
Colour	Light Green	Translucent Red
Viscosity @ 25°C, cps	3000 - 4000	3000 - 4000
Mix Ratio:		
By Weight	100	100
By Volume	100	100
Shelf Life @ 25°C, Months	12	12

**Cured Property** 

Item	Value	
Gel Time @ 25°C, Minutes	3 – 5	
Work Life @25°C, Miunutes	5 – 10	
Full Cure @25°C, Hours	24	
Tensile Strength, Mpa	>18	
Temperature Resistance, ⁰C		
- Lowest	(-60)	
<ul> <li>Highest (Long Term)</li> </ul>	100	
<ul> <li>Highest (Short Term)</li> </ul>	120	



### TECHNICAL DATA SHEET

# Hercules - Methacrylate Adhesive

May 2016



### **Application Method**

- All surfaces intended for bonding must be abraded and cleaned thoroughly prior to bonding using Iso Propyl Alcohol (IPA) or Acetone. DO NOT use oil based cleaners like turpentine and paint thinners.
- Ensure surfaces are free of dust, dirt & grease before bonding.
- Apply equal amount of both Part A & B directly onto the area to be bonded. Mix them evenly and clamp parts in position immediately.
- For best result, allow bonded parts to set under clamped pressure for 15 minutes and above.

### **Storage Conditions**

Store original container in a cool and dry area (15-25°C), away from direct sunlight. Storing this product otherwise may reduce shelf life and affects physical properties adversely .DO NOT transfer unused product back to original container

### **Packaging Availability**

- 24ML Cartridge
- 50ML Cartridge
- 2.5 Kg Set (Part A 2.5 Kg & Part B 2.5 Kg)

### **Handling Precautions**

- Refer to Safety Data Sheet (MSDS) before using this product.
- Always wear personal safety gears when handling this product. (Impervious gloves, eyes protection goggles, respiratory mask.)

