

# SMILE PLASTICS

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TDS

HDPE OPAQUE

## DESCRIPTION

**HDPE OPAQUE** is a two-component structural adhesive and typically bonds low surface energy materials (LSE) such as polypropylene (PP) and polyethylene (PE).

## TYPICAL APPLICATIONS

**HDPE OPAQUE** is very versatile, can bond a wide variety of substrates without the need for surface primers or conditioners. Typical examples shown below:

- Lightweight automotive components
- polypropylene battery cases
- cap and electronic devices
- Model aircraft
- Underwater sensors
- Furniture manufacturing

## INSTRUCTIONS FOR USE

1. Always consult SDS before using for the first time.
2. Carry out surface preparation where required.
3. Remove cap and attach mixer nozzle.
4. Dispense sufficient adhesive to ensure equal mix.
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.

## PROPERTIES OF UNCURED MATERIAL

Resin	Methyl Methacrylate
Colour	Cream / Clear
Appearance	Thixotropic Gel
Viscosity Brookland Sp6 @ 20rpm	5,000 to 15,000cps
Cure System	Exothermic. Peak at 25°C
Open Time	4 to 7 Minutes @ 20°C
Handling Strength	220 Minutes @ 20°C

## PERFORMANCE OF CURED MATERIAL

ASTM D1002 Lapshear	Up to 30 Nmm <sup>2</sup>
ASTM D638 Tensile Strength	Up to 30 Nmm <sup>2</sup>
Gap Fill	5mm
Temperature Range	-55°C to 120°C

## PACKAGING

Available in 50ml and 400ml nylon cartridges for use with a dispensing gun.

## STORAGE & SHELF LIFE

**HDPE OPAQUE** should be stored unopened in a cool dry location, out of direct sunlight. Stored correctly, this grade can offer a 6-month shelf life from manufacture.

## HEALTH & SAFETY IN USE

Always consult the SDS, which contains full information regarding the use of this product, including Transport, Disposal, Toxicological, Exposure Controls, Accidental Release and First Aid measure essential to the safe use of this product.

**Please consult SDS for statutory regulation information.**

These suggestions and data are based on information we believe to be reliable and accurate, but no guarantee of their accuracy is made. Smile Plastics shall not be liable for any damage, loss or injury, direct or consequential arising out of the use or the inability to use the product. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine whether the product is of satisfactory quality and suitability for their operations, and the user assumes all risk and liability whatsoever, in connection therewith.