

SMILE PLASTICS

HOW TO  
JOIN  
MATERIALS –  
ADHESIVES  
FOR HDPE

# ADHESIVES FOR HDPE

## General adhesion advice HDPE

Because of their low surface energy properties, HDPE boards are generally difficult to glue using conventional adhesives. We have had success gluing our HDPE materials with Bondchem M451 structural Acrylic Adhesive and Permabond® 2-Part Structural Adhesive TA4610, which are available worldwide.

## HDPE OPAQUE adhesive

Smile Plastics supplies its proprietary HDPE OPAQUE adhesive for **professional fabricator use within the UK only**.

It is a two-component structural adhesive designed for bonding low surface energy (LSE) materials such as polypropylene (PP) and polyethylene (PE).

## Typical applications

Smile Plastics HDPE OPAQUE is very versatile, and can bond a wide variety of substrates without the need for surface primers or conditioners.

## Instructions for using Smile Plastics HDPE OPAQUE adhesive

**Always consult the data sheets and SDS before using Smile Plastics HDPE OPAQUE for the first time.**

### Adhesive application instructions adhesives

1. Prepare the surface as needed before applying the adhesive.
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.

NOTE: It is always easier to remove any excess adhesive prior to cure using a suitable cleaner, such as white spirit or alcohol.

6. Allow the adhesive sufficient time to achieve handling strength before moving or unclamping components.

### Additional guidance

- The adhesive requires tight surface contact for proper bonding. If gaps exist, the bond may weaken over time. It may also be more noticeable once cured.
- We strongly recommend conducting tests to determine the most suitable adhesive and application method for your specific needs. If you do use solvent glues, or other adhesives, do not let the glue sit on the finished surface as it can damage and melt the surface of the material. For any seam bonding we recommend using masking tape to mask off the face of the panel to prevent surface damage, as well as using setting jigs/tools to achieve the best seamless join possible with the material.

# FAQS

## ADHESIVES

### FOR HDPE OPAQUE

#### **How do I request adhesives from Smile Plastics?**

We do not offer direct online ordering for adhesives. Instead, please complete our online adhesive request form, which includes the following:

- Type of adhesive(s) required
- Quantity
- Any accessories needed (e.g. nozzles, applicators)

Once submitted, you'll be contacted by a member of our team to complete your order.

#### **What is the lead time for HDPE OPAQUE adhesive?**

HDPE adhesive is typically available from stock, with a lead time of 3–5 working days from payment confirmation to dispatch.

#### **How should I store HDPE OPAQUE and what is the shelf life?**

HDPE OPAQUE should be stored unopened in a cool dry location, out of direct sunlight. Stored correctly, it can offer a **6-month shelf life** from manufacture. Please plan usage accordingly and refer to the expiry date marked on the packaging for best results.

#### **Can I buy adhesives as a standalone product?**

We strongly encourage purchasing adhesives alongside Smile Plastics sheets. One-off adhesive-only orders are evaluated individually and may be subject to additional onboarding and admin processes.

#### **Why can't I add adhesives to my cart on the website?**

To ensure safe use and responsible purchasing, adhesives are not available as open products or via e-commerce checkout. This helps us conduct proper due diligence before completing a purchase.

#### **Are adhesives available internationally?**

Currently, our adhesives are available only within the UK. If you're based outside the UK, please consult the **General Adhesion Advice** above for alternative solutions compatible with Smile Plastics materials.

#### **Do I need to complete an onboarding form?**

If you are purchasing adhesives only, you will be required to complete an onboarding form before we can issue a proforma invoice. This process is handled manually and can take additional time.

#### **What are the delivery costs for adhesives?**

We offer a flat delivery fee of £5 for all UK mainland orders of 1–24 adhesive units.

If adhesives are included in a palletised sheet order no additional shipping cost will apply — adhesives will be shipped separately as part of the overall order.

#### **Will the adhesive be shipped separately from sheet orders?**

Yes. Due to the nature of the product, adhesives must be packaged and shipped separately, even when ordered alongside Smile Plastics sheets.

# REIMAGINED MATERIALS



Certificate Number 19268  
ISO 9001, ISO 14001