

# **Technical Data Sheet**

# Preliminary **LOXEAL AC5465 A+B**(Polyolefins bonding)

# Description

Two-components fast curing acrylic adhesive. It is specifically designed for bonding Polyolefins and substrates with low surface energy (PP, PE, PTFE), in combination with other plastics and metals as well.

Loxeal AC5465 does not require any surface treatment, thanks to its physical features, it allows to design 0-gap joints and to bond substrates with extremely small gaps. Its application provides a resistant and transparent bonding when used at 0-gap on transparent substrates.

It provides high shear and peeling strength.

Without solvent, mixing ratio 1:1

### Typical physical properties

Part A Part B

Chemical composition: methacrylate ester Appearance: translucent transparent

Viscosity (+25°C - mPa s): 25000 12000

Mixing ratio (A+B): 1:1

Shelf life: 6 months in unopened packaging at +2°C/+7°C

# Typical Curing properties at +25°C

Pot life: 6 minutes\*
Fixture time: 12 minutes\*\*
Full cure: 72 hours

Shear strength (after 72 hours at +25°C ISO 4587):

 PP:
 5 N/mm²

 PE:
 3 N/mm²

 PTFE:
 1,5 N/mm²

 PMMA:
 6 N/mm²

 PETG:
 6 N/mm²

 PP/Stainless steel
 6 N/mm²

 PE/Stainless steel
 4 N/mm²

## Warnings

This adhesive is not approved for usage neither with pure nor with gaseous oxygen.

### **Directions for use**

#### Surfaces preparation

For best results we recommend to degrease and clean substrates.

Lightly scratch the surfaces (on metal substrates) with a tool and then to degrease and clean with a cleaner suitable to the substrate (i.e. Loxeal Cleaner 10 or Acetone)

# • Adhesive application

Products are available in dual cartridges packaging

- 1. Open the cartridge and extrude a small quantity of adhesive, until the 2 parts come out homogeneously.
- 2. Mix Part A and Part B by hand or using the static mixers (separately provided) after setting it on the cartridge. If mixing the 2 parts by hand, we recommend to pay attention to the mixing ratio given on the Technical Data Sheet.
- 3. Apply the product, when using the static mixer, completely discard the first 3/4 cm of the extruded product.

Avoid to mix big quantities of product because heating produced by chemical reaction may be dangerous and cause loss of product.

## Pot life

Pot life of the mixed product varies according to the temperature. Higher temperature reduces the pot life. Apply product at temperature higher than +15°C.

# Assembly

Parts to be bonded shall be assembled immediately after product application and kept close until full polymerization without providing any mechanical stress.

# Cleaning

Excess of product can be removed with Acetone or any other solvent based cleaner compatible with the substrates to bond. Application tools and dosing systems shall be cleaned before the product is hardened. Cured product can be removed only mechanically.

<sup>\*</sup> Time detected using 6g of mixed product

<sup>\*\*</sup> time needed until 0.1 N/mm² shear strength is achieved

# Storage

Store refrigerated at temperature between +2°C/+7°C. To avoid contaminations do not refill containers with used product. For further information on applications, storage and handling contact Loxeal Technical Service.

# Safety and handling

Consult Material Safety Data Sheet before use.

### Note

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