

# MACROPLAST UK 8326 B30 / MACROPLAST UK 5401

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#### PRODUCT DESCRIPTION

MACROPLAST UK 8326 B30 / MACROPLAST UK 5401 provides the following product characteristics:

Technology	Polyurethane
Product Type	Structural Adhesive
Cure	Polymerisation
Condition	Solvent-free
Components	Two-component
Application	General assembly
Appearance	Beige
(Component A)	
Appearance	Brown
(Component B)	
Mixing Ratio,	5:1
by weight	
Part A: Part B	
Mixing Ratio,	4.2 : 1
by volume	
Part A: Part B	

#### **Application Areas**

MACROPLAST UK 8326 B30 / MACROPLAST UK 5401 is a solvent-free two-component adhesive, based on polyurethane. The resin part (component A) contains organic compounds with hydroxyl groups, the hardener (component B) is based on isocyanates. By mixing both components in a weight ratio of 5:1 a hard elastic product is formed through chemical reaction. After curing the product exhibits no measurable change in volume. Due to the use of natural raw materials a variation in colour between different batches (depending on cultivation area) is possible.

MACROPLAST UK 8326 B30 / MACROPLAST UK 5401 is used for hard elastic, bend-resistant bondings of pretreted metals, wood and plastic with rigid foams.

In individual cases the product can be used on non pretreated metal surfaces. However, this requires intensive consultancy in the application technology. Another field of application is the assembly bonding of composite elements (sandwich elements), e.g. for the production of vehicles, containers, the construction industry and shipbuilding.

# **TECHNICAL DATA**

Component A Macroplast UK 8326 B30:

Consistency: pasty Density,  $g/cm^3$  1.46  $\pm$  0.05

Component B Macroplast UK 5400:

Consistency: thin liquid Density,  $g/cm^3$  1.22  $\pm$  0.05

Mixture (Component A + B):

Consistency: pasty
Viscosity at 20°C, mPas 250,000 to
Brookfield RVT, Henkel method 11 310,000

Pot life (240g, 20 °C) , min Henkel method 21	25 to 35
Initial setting time (23 °C), hrs	3 to 4
Final setting time (23°C), days	5 to 7
Consumption, g/m <sup>2</sup>	200 to 500
	(depending on substrate)
Tensile shear strength, MPa * EN 1465, Henkel method 40	> 12
In service temperature, °C	-40 to +80
Short exposure (up to 1 h), °C	150

#### **DIRECTIONS FOR USE**

#### **Preliminary Statement:**

Prior to application it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed.

## Pretreatment:

The substrate should be clean, dry, free of dust, oil, grease and other contaminants. The usage of suitable primers on metal surfaces can improve the adhesion and/or the long-term bond stability. The surface of plastic materials should be cleaned, so as to remove any kind of release agents present on the substrate surface. An improvement of the adhesion can be achieved by grinding or sandblasting the surface.

## Application:

Adhesive components can be mixed manually, with stirring application or two-component mixing equipment. The adhesive is only to be used within a limited time (pot life). After this time the mixture gels up and is not suitable for use. Therefore only the amount that can be applied within the time of pot life should be mixed. The pot life depends on the quantity and temperature of the mixed batch. With larger quantities and an increase in temperature, the pot life decreases. Lower temperatures extend the pot life. Adhesive components should not come into contact with moisture during storage or application. Contact with moisture (water vapour) generates foaming of the adhesive and weakens the bondline. Therefore all packaging should be sealed properly and protected against humidity during storage.

# Curing:

MACROPLAST UK 8326 B30 / MACROPLAST UK 5401 can be cured between 15°C and elevated temperatures (up to 60°C). The curing time will be reduced substantially with increasing temperatures. The addition of chemical catalysts (accelerators) also speeds up the curing reaction (i.e. pot life, open time). While curing there should be adequate contact pressure (load pile, presses, clamps) and fixtures to hold the joint in place.



## Cleaning:

Fresh, uncured material (cleaning application equipment, substrate contamination etc.) can be removed with Macroplast B 8040; cured adhesive can only be removed mechanically.

## Classification:

Please refer to the corresponding safety data sheets for details on:

Hazardous Information Transport Regulations Safety Regulations

## Storage:

When properly stored in a cool, dry location, with the container tightly closed when not in use, this product will have a shelf life of at least 12 months.

Optimal Storage: 15°C to 25°C. Storage below 10°C or greater than 50°C can adversely affect product properties. Component B is frost-sensitive.

## **ADDITIONAL INFORMATION**

#### Disclaimer:

The information provided herein, especially recommendations for the usage and the application of our products, is based upon our knowledge and experience. Due to different materials used as well as to varying working conditions beyond our control we strictly recommend to carry out intensive trials to test the suitability of our products with regard to the required processes and applications. We do not accept any liability with regard to the above information or with regard to any verbal recommendation, except for cases where we are liable of gross negligence or false intention.

This datasheet replaces all former versions.

Reference 0.0

