

**BUILDING TRUST** 

PRODUCT DATA SHEET

# SikaForce®-7570 HP LO3

Fast assembly adhesive for components

## TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties		SikaForce®-7570 HP L03	SikaForce®-7570 HP (B)
Chemical base		Polyols, filled	Isocyanate derivates
Color (CQP001-1) mixed		Black	White, yellowish
		Black	
Cure mechanism		Polyaddition	
Density (uncured)		1.42 kg/l	1.22 kg/l
Mixing ratio by volume by weight		100 : 20	
		100 : 17	
Viscosity (CQP029-4)		50 000 mPa·s	20 000 mPa·s
Application temperature ambient		15 – 40 °C	
	adhesive	15 – 30 °C	
Pot life (CQP536-2)	measured until 500 Pa·s	3 minutes	
Shore A hardness (CQP023-1 / ISO 48-4)		60 <sup>A</sup>	
Tensile strength (CQP036-1 / ISO 527)		3.4 MPa <sup>A</sup>	
Elongation at break (CQP036-1 / ISO 527)		250 % <sup>A</sup>	
E-Modulus (CQP036-1 / ISO 527)		5.4 MPa <sup>A</sup>	
Tensile lap-shear strength (CQP546-1 / ISO 4587)		3.4 MPa <sup>A, B</sup>	
Shelf life		6 months <sup>c</sup>	

CQP = Corporate Quality Procedure

 $^{\mbox{A)}}$  7 days at 23 °C / 50 % r.h.

#### **DESCRIPTION**

SikaForce®-7570 HP LO3 is a flexible 2-component adhesive. It consists of a filled polyol based resin and an isocyanate based hardener. SikaForce®-7570 HP LO3 is designed for semi-structural bonding of mixed components in Automotive Industry.

The formulation does not contain plasticizer, which reduces the risk of Environmental Stress Cracking (ESC).

#### **PRODUCT BENEFITS**

- Very good adhesion to a broad range of plastic substrates
- Can be accelerated by heat
- Very good and long-term ageing resistance
- Suitable for substrates that have a high requirement for surface finish

## AREAS OF APPLICATION

SikaForce®-7570 HP L03 is designed for bonding automotive exterior parts. Due to its flexible properties and its good adhesion to thermoplastic materials (e.g. PP, PC ABS, PC PET, ASA), it can be considered for components like tailgates or spoilers. Using heat accelerated curing, SikaForce®-7570 HP L03 has a typical handling time of 3 – 5 minutes after the bonding process. The duration of this timespan depends significantly on several factors, such as the size of the parts, heating device, substrate thickness, etc.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

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B) e-coated steel; bondline thickness 1.6 mm C) stored below 25 °C

#### **CURE MECHANISM**

The curing of SikaForce®-7570 HP LO3 takes place by chemical reaction of the two components. Higher temperatures speed up and lower temperatures slow down the curing process.

For typical strength build up data at ambient temperature (23 °C) see table below.

Time [h]	Lap shear strength [MPa]
1	1.5
2	2.4
4	2.9
6	3.0

Table 1: Strength build up SikaForce®-7570 HP LO3 at 23 °C

Full cure and final adhesion performance is achieved after 7 days. Lap shear strength with heat accelerated curing has to be determined specifically for each application. Factors such as substrate, heat source and device can influence the curing speed significantly.

#### CHEMICAL RESISTANCE

SikaForce®-7570 HP L03 is resistant to hydrolysis.

The chemical resistance is influenced by several factors such as chemical composition, concentration, period of exposure and temperature. Therefore a project related testing in case of chemical or thermal exposure is required.

#### METHOD OF APPLICATION

#### Surface preparation

Surfaces must be clean, dry and free from grease, oil and dust.

Based on the surface and type of material, a physical or chemical pre-treatment might be required. Type of pre-treatment must be determined by preliminary tests.

#### **Application**

To process SikaForce®-7570 HP L03 adequate dosing units and mixers are required. Static or dynamic mixing equipments can be used.

Static mixers must be tested and confirmed by carrying out preliminary trials under manufacturing conditions.

Adhesion as well as curing speed can be improved by heat up to max. 100 °C.

For automated applications a suitable filter system has to be used.

For support on selecting and setting up a suitable pump system, contact the System Engineering department of Sika Industry.

#### Removal

SikaForce®-7570 HP L03 may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent.

Hands and exposed skin have to be washed immediately using hand wipes such as Sika® Cleaner-350H or a suitable industrial hand cleaner and water.

Do not use solvents on skin.

#### **FURTHER INFORMATION**

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.

Copies of the following publications are available on request:

Safety Data Sheets

### PACKAGING INFORMATION

SikaForce®-7570 HP L03

	25 kg
Drum	300 kg

SikaForce®-7570 HP (B)

Pail	22 kg

### **BASIS OF PRODUCT DATA**

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

#### **HEALTH AND SAFETY INFORMATION**

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

#### DISCLAIMER

The information, and, in particular, the recommendations relating to the application and enduse of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.







