

SikaForce®-7550 L05

Elastic, very fast-curing and non-sagging assembly adhesive

Technical Product Data

Properties	Component A (Resin)	Component B (Hardener)
Chemical base	Polyols, filled	Isocyanate derivates, unfilled
Colour	Black	Whitish
Mixing colour	Black	
Cure mechanism	Polyaddition	
Density (25 °C) (CQP ¹ 553-1)	1,33 g / cm ³ , approx.	1,13 g / cm ³ , approx.
Solid content	100%	100%
Viscosity (25 °C) (CQP 538-1 / DIN 53019)	25.000 mPas, approx.	25.000 mPas, approx.
Mixing viscosity (CQP 536-1 / DIN 53019)	170.000 mPas, approx.	
Mixing ratio	parts per weight 100	42
	parts per volume 100	50
Product application temperature	15 - 30 °C	
Non-sag properties	good	
Open time ²⁾ (maximum time between application of adhesive and assembly operation) (CQP 526-1)	5 min., approx.	
Tensile-shear strength (CQP 046-1 / ISO 4587)	5 MPa, approx	
Strength development and curing speed according tensile-shear strength ²⁾ (CQP 046-1 / ISO 4587)	1 h 2 h 24 h	0,60 MPa, approx. 1,00 MPa, approx. 3,20 MPa, approx.
Shore-A hardness (CQP 023-1 / ISO 868)	70, approx.	
Tensile strength (CQP 036-1 / ISO 37)	5 MPa, approx.	
Elongation at break (CQP 036-1 / ISO 37)	400%, approx.	
Glass transition temperature (CQP 509-1 / ISO 4663)	-50 °C, approx.	
Electrical resistance (CQP 079-2 / ASTM D 257-99)	10 ¹¹ Ω cm, approx.	
Service temperature (continuous) (CQP 513-1)	-40 °C to +90 °C, approx.	
Shelf life (stored in original closed packaging below 25 °C), (CQP 016-1)	6 months	

¹⁾ CQP = Corporate Quality Procedure

²⁾ 23 °C (73 °F) / 50% r.h.

Description

SikaForce®-7550 L05 is a thixotropic 2-component assembly adhesive, which cures by chemical reaction of the two components to form a durable elastomer. It consists of a filled polyol based resin and an isocyanate based hardener.

SikaForce®-7550 L05 is manufactured in accordance with ISO 9001/14001 quality assurance system and with the responsible care program.

Product Benefits

- Cold applied and highly thixotropic

- Short cut-off string
- Fast cure and strength development independent to air humidity
- Elastic/good gap-filling capabilities
- Adequate working time to complete assembly, despite rapid cure
- Bonds well to a wide variety of substrates
- Withstands high dynamic stresses
- Vibration damping
- Electrical non conductive
- Solvent and PVC-free
- Ageing resistant

Areas of Application

SikaForce®-7550 L05 is suitable for structural joints that will be subjected to dynamic stresses, where rapid strength development and fast cure is an essential requirement. SikaForce®-7550 L05 is ideal for the adhesive bonding of large components and assemblies. Suitable substrates are plastics and metals, particularly aluminium sheets, steel, metal primers and paint coatings (2-component systems), wood and ceramic materials. Seek manufacturers advice before using on transparent plastics that are prone to stress cracking.

Industry



Cure Mechanism

The curing of SikaForce®-7550 L05 takes place by chemical reaction of the two components. Higher temperatures fasten, lower temperatures extend the curing process.

Chemical Resistance

SikaForce®-7550 L05 has an excellent resistance against hydrolyses and temperature. Without exposure to chemicals the adhesive resists up to 90°C. In case of expected chemical or thermal exposure, we recommend a project related testing or contact Technical Service Department Sika Industry.

Method of Application

Surface preparation

Surfaces must be clean, dry and free from all traces of grease, oil and dust. Adhesion can be improved as follows:

Aluminium (AlMg3, AlMg Si1, anodized)	Scotch Brite + Sika® Cleaner-205 + Sika® Primer-204 N
Steel (hot-dipped, galvanized)	Scotch Brite + Sika® Cleaner-205 + Sika® Primer-204 N
Steel (Cathode dip coating)	Oil, grease and dust free
Stainless steel	Sika® Aktivator
GRP (unsaturated polyester) gelcoat side	Scotch Brite + Sika® Aktivator
GRP (unsaturated polyester) lay-up side	Scotch Brite + Sika® Aktivator + Sika® Primer-206 G+P or Sika® Primer-204 N
Ceramic	Sika® Aktivator

For advice on specific applications contact the Technical Service Department Sika Industry.

Application

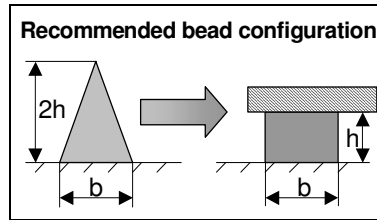
2-C cartridges:

we recommend the use of a suitable compressed air piston-type cartridge gun.

Use a static-mixer MC 13-24. Cut off the first four rings of the nozzle. Before application on original substrates it is absolutely

necessary to extrude and discard a bead of at least 30 cm to get a good mixing quality.

To ensure a uniform thickness of adhesive when compressed, we recommend to apply the adhesive in the form of a triangular bead.



Metering and Application Equipment:

SikaForce 7550 L05 should preferably be mixed and metered by means of a geared pump and dynamic mixer. Depending on the nature of the test, and should the occasion rise, a piston pump and static mixer may also be employed. For advisement regarding the choice and assembly of metering and mixing equipment as well as processing, please contact our System Engineering Department. Do not apply at temperatures below 15°C or above 30°C. The optimum temperature for substrate is between 15°C and 25°C.

Removal

SikaForce®-7550 L05 in uncured state may be removed from tools and equipment with Sika® Remover-208, isopropanol, acetone, etc. Once cured, the material can only be removed mechanically.

Hands and exposed skin should be washed immediately using Sika® Handclean Towels or a suitable industrial hand cleaner and water. Do not use solvents!

Storage conditions

Resin and hardener are sensitive to moisture. Therefore they have to be stored in tightly closed containers. After product take-out the containers have to be closed immediately.

Resin and hardener must be stored between 15 - 30°C.

Further Information

Copies of the following publications are available on request:
- Material Safety Data Sheets

- General guidelines for bonding and sealing with Sika® products
- Application Manual for cartridges

Packaging Information

Component A (Resin)	Hobbock 25 kg
Component B (Hardener)	Hobbock 25 kg
2c-cartridge + static mixer MC 13 - 24	450 ml (component A+B)

Important

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

Note

The information, and, in particular, the recommendations relating to the application and end-use 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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.



Further information available at:
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