



Technical Data Sheet SiMP 2K 50 LV
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SiMP 2K 50 LV

Two-parts SiMP low viscosity flexible adhesive

DESCRIPTION

SiMP 2K 50 LV is a two-component low viscosity SiMP – Silyl Modified Polymer based flexible adhesive. Once mixed it cures to form a high-performance adhesive with a wide spectrum of adhesion on industrial materials, solvent and isocyanate free and odorless. Its low viscosity allows surface application by spray (with special installations), by roller (with a gluing machine or by manual application) and trowel. Excellent fast grab is granted even though the product has a low viscosity.

AREAS OF APPLICATION

SiMP 2K 50 LV ensures high performance for all applications which require a permanently flexible elastic surface bonding in the industrial and furniture sector, panel assembly, insulation and refrigeration, transportation (automotive bodywork, refrigerated vans, containers) railway and marine sectors, in assembly and general applications. Thanks to fast cross-linking it is possible to bond parts in a continuous working process. SiMP 2K 50 LV can be used with metals, powder-coated, varnished, galvanized, anodized, chromed or hot zinc dipped surfaces, various plastics, ceramics, stone, concrete and wood. Due to the large variety of materials and compositions, preliminary adhesion tests are recommended.

FEATURES

- Environmentally friendly, free of isocyanates and solvents, no Hazard symbol
- No bubble formation - Odorless
- Reticulation through volume even between non-porous materials and at low temperatures
- Permanently flexible over a wide range of temperatures
- No change in volume – No shrinkage
- Low viscosity - easy to apply with spray, trowel or roller
- Non-sag in vertical application, fast grab effect
- Excellent primerless adhesion on all typical construction and industrial materials
- Fast strength build-up.
- Neutral behavior, does not attack support surfaces
- Impact and vibration resistant (shock absorbing)
- Spot weldable before curing



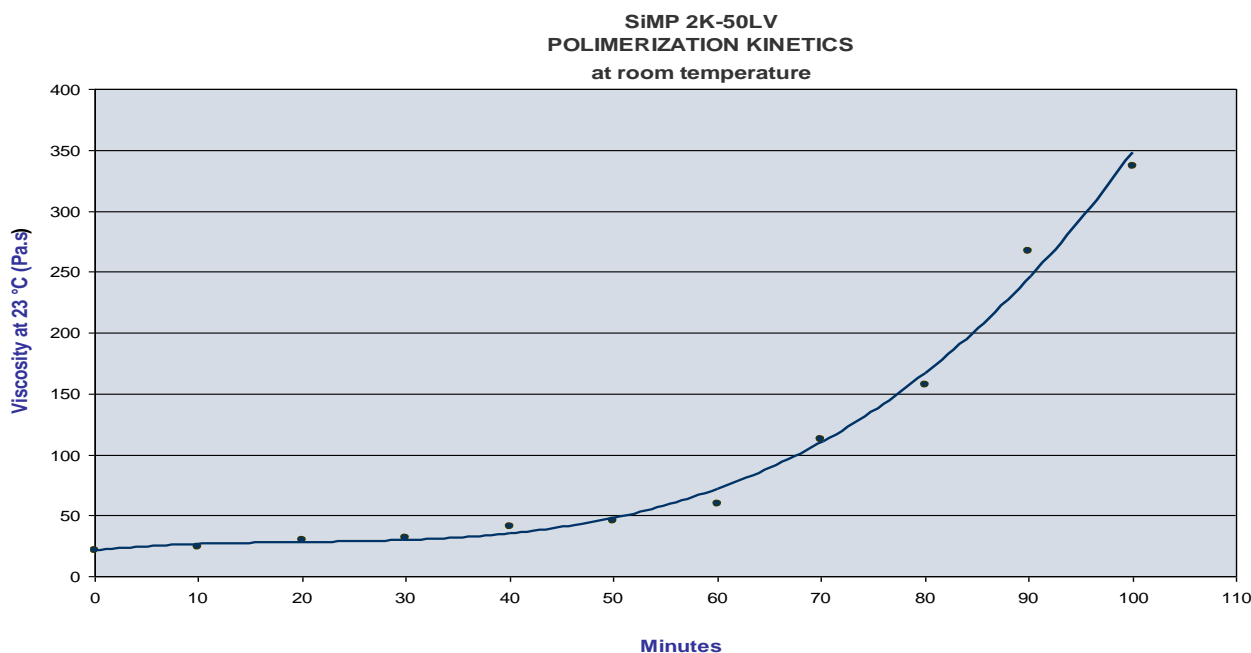
TECHNICAL DATA components

Chemical nature	SiMP – Silyl Modified Polymer	Hardener
Appearance	Low viscosity paste	Liquid
Color	Grey	Grey
Density [g/cm ³] (NPT method 03) (23°C and 50% RH)	ca. 1.5	ca. 1.38
Mixing ratio (volume)	3.64	1
Mixing ratio (weight)	4	1

TECHNICAL DATA mixed product

Appearance	Low viscosity paste
Color	Grey
Chemical nature	SiMP – Silyl Modified Polymer
Density [g/cm ³] (NPT method 03) (23°C and 50% RH)	ca. 1.48
Pot life [min] (23°C and 50% RH)	ca. 50
Handling time [min] (23°C and 50% RH)	ca. 20
Full hardening time [h] (23°C and 50% RH)	ca. 24
Hardness Shore A (DIN 53505)	ca. 30
Tensile strength [N/mm ²] (DIN 53504)	ca. 1.7
Elastic modulus [N/mm ²] (DIN 53504)	ca. 1.5
Elongation at break [%] (DIN 53504)	ca. 130
Application temperature [°C]	From +5 to +40
Temperature Resistance [°C]	From -40 to +90

POLIMERIZATION KINETICS



APPLICATION

The surfaces to be treated should be perfectly clean, dry and free from dust and grease. It is necessary to treat the bonding surface according to NPT application guidelines, eventually using a specific CLEANER or ACTIVATOR from NPT range. It is advisable to carry out preliminary adhesion tests on the support.

Prepare a mixing vessel with sufficient volume for both components in the total amount intended. Pour the proportion of 1 bottle (1.25 kg) of component B for every 5 kg of component A. Do not exceed the total amount desired, the unused material will harden within the workability time and must be thrown away. The mixing can be done by means of an electric instrument with a specific mixer. Make sure that the material has a uniform color, the unmixed product should not be used and thrown away. The components must be assembled within the workability time with constant pressure over the entire bonding area. Avoid contact with solvents during polymerization.



CLEANING OF EQUIPMENT AND PERSONAL PROTECTIVE MEASURES

Clean the tools used with acetone or solvent. When the adhesive has not yet hardened, it can be removed using paper or a cloth. Once hardened, the product can only be removed mechanically. Avoid skin contact by using latex, rubber or polyethylene gloves. If it comes in contact with the skin, remove immediately and wash with soap and water.

PACKAGING

PART A: Metal pail - 30 Kg

PART B: Plastic bottle 1,25 kg – Box of 6

STORAGE AND SHELF LIFE

SiMP 2K 50 LV can be stored for 12 months in its original packaging (unopened container) between 10°C and 25°C in a cool, dry place. The storage temperature should not exceed 25°C for extended periods of time. Keep away from wet areas, direct sunlight and heat sources.

GENERAL INFORMATION

The information contained in this technical data sheet is to the best of our knowledge correct, being based on our knowledge and experience to date and cannot be used as a guarantee, due to the various different materials present on the market and the fact that the application conditions are not under our direct control and supervision. NPT srl, however, guarantees constant product quality. NPT srl, has the right to modify or up-date this technical data sheet according to requirements. Customers are kindly requested to verify that they are in possession of the latest version.

ALWAYS CONSULT THE MATERIAL SAFETY DATA SHEET BEFORE USING THE PRODUCT