



Technical Data Sheet U-Bond Ultra 2K Assembly
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U-Bond Ultra 2K Assembly

Structural assembly two-parts polyurethane adhesive

DESCRIPTION

U-Bond Ultra 2K Assembly is a thixotropic polyurethane two-components structural adhesive specially designed for repair and assembly bonding between a wide range of materials like thermosetting polymers, thermoplastics, steel, aluminum and glass. Room temperature curing, very fast curing.

AREAS OF APPLICATION

U-Bond Ultra 2K Assembly is specific for assembly in car and bus body, truck and rail coaches, vehicle and container construction, brackets in the doors or window sector. Thanks to fast cross-linking it is possible to bond parts in a continuous working process. 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

- Extremely quick grip and curing
- Simple processing
- Does not sag or run
- Very wide adhesion range
- Suitable for general purpose bonding
- High mechanical and dynamic stress resistance
- Spot weldable before curing
- May be sanded and overpainted
- Solvent free, odourless



TECHNICAL DATA mixed product

Appearance	Non-sag thixotropic paste
Color	Grey
Chemical nature	Polyurethane
Hardness Shore D (DIN 53505)	ca. 70
Pot life [min] (23°C and 50% RH)	ca. 12
Handling time [min] (23°C and 50% RH)	ca. 45
Shear strength [dN/cm ²] (ASTM D1002)	ca. 50
Elastic modulus [N/mm ²] (ASTM D638)	ca. 300
Elongation at break [%] (ASTM D1002)	ca. 5
Application temperature [°C]	From +5 to +30
Temperature Resistance [°C]	From -30 to +120

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.

Fit the cartridge into a specific manual operated gun. Blending should be made through the included static mixer composed by a minimum of 16 elements, a lower number of components doesn't allow a complete mixing. A higher number of components would increase speed of the chemical reaction of hardening. Static mixers are single use and disposable. Ensure the extruded material has a uniform color, unmixed product should not be used and thrown away.

The components must be assembled before the adhesive starts curing and sealed with a steady pressure all over the gluing area. The strength and durability of bonded joints depend on proper pre-treatment of the surfaces to be bonded. Joint surfaces should be cleaned with a good degreasing agent in order to remove all traces of dust, dirt, oil and grease. Tooling and finishing must be carried out within the pot life.

Avoid contact with solvent cleaners during cure. When applying sealant, avoid air-entrapment. Bonded elements may require additional holding or support during curing period.



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

Coaxial cartridge 280ml – 12 pieces per box

STORAGE AND SHELF LIFE

U-Bond Ultra 2K Assembly 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