

Henkel

Quality for Professionals

40 Years of Experience and Research



Pipe Adhesives
**Installation
Instructions**

Henkel

PREPARATION

Have the following materials and tools ready when joining pipes:



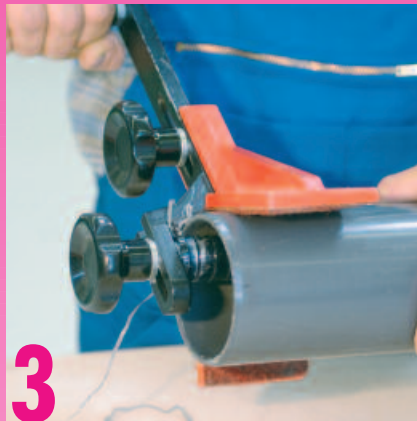
- Tangit brush cap
- Absorbent paper
- File
- Brush
- Pipe cutter
- Chamfering tool
- Deburrer
- Pencil
- Gauge
- Pair of gloves

Pipe outside diameter mm	Chamfer angle	b mm
up to 16	15°	1-2
20 to 50		2-4
63 to 400		4-6



2

Cut pipes at right angles. Use a pipe cutter or a saw.



3

Chamfer pipe ends with a chamfering tool or file.



4

Debur pipe ends. Use a deburrer or a file.



5

Measure the full pipe insertion depth.



6

Mark this depth at the end of the pipe.



7

Before use, stir Tangit adhesive thoroughly and check the product's flow behaviour.



8

If the adhesive no longer flows off, the product cannot be used any longer. Tangit adhesive can be stored for at least 2 years after the filling date.



9

During breaks close tins with Tangit brush cap to prevent drying.

JOINING

AMBIENT TEMPERATURE	OPEN TIME
20 °C	4 Min.
25 °C	3 Min.
30 °C	2 Min.
40 °C	1 Min.
>40 °C	<1 Min.

Tangit open time depends on the ambient temperature and on the thickness of the adhesive film. The times shown here are all related to Tangit PVC-U adhesive and an adhesive film thickness of 1 mm. When using Tangit PVC-C or Tangit ABS adhesive, the different processing and setting times must be taken into account.



Ensure that both the pipe/fitting are perfectly cleaned. Surfaces to be bonded must be perfectly dry before applying adhesive.



Stir adhesive and soak the brush well with adhesive. Apply a normal layer of adhesive on the inside of the fitting in the direction towards the end of the pipe.



Cover the pipe end axially. Apply a thicker layer to the pipe end with firm brush pressure. The brush strokes should always be in an axial direction.



Immediately insert the pipe into the fitting to its full depth without twisting and bring them into the correct alignment. Remove excess adhesive with absorbent paper.

TESTING

WAITING TIME/ LOADING

Do not move pipes for at least 5 minutes after joining. At temperatures below +10°C the waiting time should be increased to at least 15 minutes. The joined pipes can be lowered into the ground after 10 to 12 hours.



PRESSURE TESTS

Wait for 24 hours after completing the last bond before filling the pipelines and testing under pressure at 1.5xPN. As a rule of the thumb, if the pipeline is to be operated at working pressure (repair), the waiting time is 1 hour per 1 bar of working pressure. Pipelines that are not to be used immediately should be rinsed thoroughly with water and remain filled with water until required, where possible.

SAFETY MEASURES

Both Tangit and Tangit cleanser are flammable. Solvent fumes are heavier than air and can form explosive mixtures. For this reason ensure sufficient ventilation during processing, drying and also after joining.

For detailed information please see the material safety data sheets.





Tangit PVC-U

Special adhesive for joining pressure pipes made of PVC-U, cable ducts and drainage pipes.
RECOMMENDED FOR: Water supply, distilled water, waste water, refrigerating brine, sea water, plant and apparatus engineering, food and beverage industry applications.
 Resistant to: acids and bases. Temperature range: 0°C to +60°C.



Tangit PVC-C

Special adhesive for joining pressure pipes made of PVC-C
RECOMMENDED FOR: hot and aggressive media, highly corrosive environments at high temperatures, the chemical industry in general (waste acid) and industrial hot water applications. Resistant to: acids and bases at high temperatures and at high concentrations.
 Temperature range: 0°C to +80°C, up to +90°C if operated pressureless.



Tangit ABS

Special adhesive for joining pressure pipes made of ABS.
RECOMMENDED FOR: Brine at low temperatures, chilled water, refrigerants, air conditioning systems, water supply, water treatment, process water, mining and food industry applications.
 Resistant to: bases, weak acids and salts.
 Temperature range: -40°C to +60°C.



Tangit Cleaner

Cleaner for glued joints made of PVC-U, PVC-C and ABS.



Tangit PE/PP/PVDF

Special cleaning agent for plastic weld joints, preferably for polyethylene (PE), polypropylene (PP) and polyvinylidene fluoride (PVDF). Available in liquid form and as tissues.



Tangit Dytex Special adhesive

Special adhesive for joining pressure pipes made of PVC-U and PVC-C to be used for transporting highly concentrated inorganic acids.

Tangit Dytex Dissolvent

Dissolvent for PVC-U and PVC-C joints to be bonded afterwards with Tangit Dytex special adhesive.



40 Years of Experience – For Your Security



Use Tangit for pipe cementing - and stay on the safe side! Tangit products have been built on over 40 years of extensive research and experience, thus ensuring consistent outstanding product quality. This is why Tangit gives you a unique guaranteed bond:

Our research has shown that a joint properly sealed with Tangit has a lifespan similar to that of the pipe itself and Tangit has enough open time to join pressure pipes up to a

diameter of 400 mm. You cannot join pipes more safely. Ongoing quality control at Henkel's Research and Development department ensures consistently high product quality and has been independently approved by four renowned external institutes – the Süddeutsches Kunststoff Zentrum (South German Center for Polymers), the Staatliches Materialprüfungsamt NRW (Governmental Office for Materials Testing), the CSTB in France, and the Dutch Kiwa/ATA. Tangit has been tried and tested

around the world – in Europe, Africa, America, Asia, and the Middle East – wherever lasting pipe joints are required.

SÜS Süddeutsches
Kunststoff-Zentrum
Amtlich anerkannte Prüfstelle für Kunststoffe

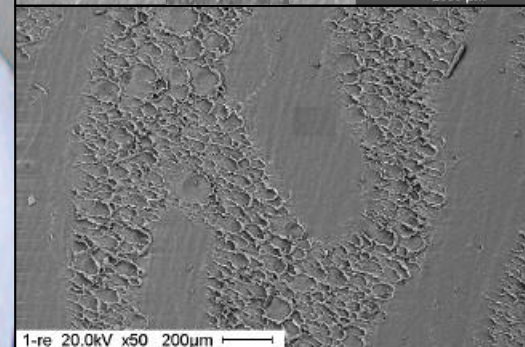
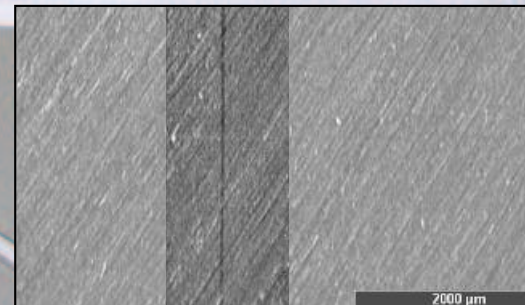
MPA NRW
STAATLICHES
MATERIALPRÜFUNGSAMT
NORDRHEIN-WESTFALEN

CSTB
CENTRE SCIENTIFIQUE ET
TECHNIQUE DU BATIMENT

kiwa ATA

Scanning electron microscope
to visualise surface structures and to detect chemical elements.

Video light micrograph
showing the seam and the solvent
penetration depth in cross section.



Laser scanning micrographs
showing PVC-surfaces. This allows conclusions
to be drawn as to the bonding behaviour after
pretreatment (cleaning).