


**Technical Data Sheet**
**Tangit ABS**
**I. Material**
**Product name:**

Tangit ABS special adhesive

**Intended use:**

Tangit ABS is suitable for tensile stress resistant joints of pressure and sewage pipes equipped with ABS fittings.

**Packaging:**

650 g tins

**Material type:**

Solvent-containing adhesive based on methyl ethyl ketone and butyl acetate.

**Shipping unit:**

6 tins of 650 g

**II. Special features**

Complies with the requirements of EN 14814, Adhesives for thermoplastic piping systems for fluids under pressure.

**Technical data**
**Raw material basis:**

ABS, methyl ethyl ketone, butyl acetate

**Viscosity:**

8000-13000 mPas, spindle 4, 30 rpm at 20 °C.

**Density (spec. gravity):**

approx. 0.87 g/ml

**Temperature resistance:**

Permanent temperature resistance up to +40°C depending on the pressure load; short-term increase to max. +60°C is possible if required by the system.

**Resistibility:**

The bonded joints are waterproof. Their chemical properties largely correspond to those of the basic material.

### Consumption:

For the production of 100 bonded joints the following **approximate** amounts of adhesive are required:

Pipe diameter (mm)	20	25	32	40	50	63	75	90	110	140	160	225
kg Tangit ABS	0.35	0.4	0.45	0.6	0.9	1.1	1.25	1.7	2.5	5	6.5	12.5
Cleaner	0.2	0.3	0.5	0.7	0.9	1.1	1.3	1.4	1.7	2.1	2.5	4.5

**Please note:** The adhesive amounts indicated above are maximum values based on practical experience. The actual consumption in a given application depends on working method, pipe gap and temperature.

### III. Instructions for use

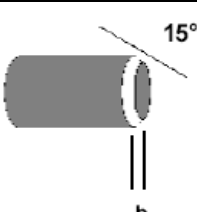
#### Preparation of the surfaces to be bonded:

The pipe ends must be cut off at right angles, chamfered at an angle of 15° from the outside and then deburred on the inside.

#### Application:

Stir Tangit ABS well before use. The adhesive should flow slowly off a stick held at an angle, forming a trail. In an axial direction, apply a uniform

Immediately insert the pipe into the socket to stop resp. to full depth, without twisting or jamming it. Hold fast for several seconds until the adhesive begins to dry.

Measures for b	Pipe outside diameter		Sketch	Pipe outside diameter <i>d</i> (mm) versus bond length <i>t</i> (mm)			
	inches	mm		d	t	d	t
1 - 2 mm	up to 3/8	12		16	14	63	38
				20	16	75	44
2 - 3 mm	½ - 1½	12 - 40		25	19	90	51
				32	22	110	61
3 - 4 mm	2 - 6	50 - 150		40	26	140	76
				50	31	160	86
					225	119	

#### Pretreatment:

Remove any dirt adherent to the surfaces to be bonded (pipe end outside, socket inside) using tissue paper. If the surfaces are free of grease, final cleaning with tissue paper and Tangit Cleaner is not necessary. Then measure the fitting insertion depth (= bond length) and mark it on the pipe end so that the application of the required amount of adhesive and the complete insertion of the pipe can be checked. The surfaces must be dry before application of the adhesive. Any ice must be removed by careful heating.

coat of adhesive - first to the inside of the socket, then to the pipe. Apply thinly inside the socket in order to avoid the detrimental formation of beads inside the pipe, but apply generously to the pipe end.

Recommended brush sizes for pipe diameters up to:

- 32 mm = 8 mm round brush
- 32 - 50 mm = 1"-flat brush
- 65 - 160 mm = 2"-flat brush

Then remove excess adhesive with tissue paper. As the adhesive cures rapidly, the components must be completely joined within 1 minute after application.

From 75 mm outer diameter upwards, the adhesive should be applied to pipe and socket simultaneously by two persons. The open time of Tangit ABS, i.e. the time from the start of adhesive application until joining the parts, depends on ambient temperature and/or film thickness of the applied adhesive.

**Pressure tests and filling:**

Before further work on the pipes resp. before filling or performing a pressure test, waiting times need to be observed. These depend on the ambient temperature as well as on the pipe diameter and pipe fit. Please refer to the values listed in the following table.

Especially in the range of d 160 / d 225 the pipeline components need to be supported so that the construction's own weight does not have a detrimental effect on the adhesive bond.

At operating temperatures above + 30 °C, the max. operating pressures must be adjusted accordingly. Further details can be obtained from the manufacturers of the pipes and fittings.

Diameter (d)	Temperature	Waiting time before further work	Filling and testing	Further use after repair
up to d 140	above 10°C	10 min	24 hrs	1 h/bar
up to d 140	below 10°C	15 min	48 hrs	2 h/bar
d 160 / d 225	above 10°C	30 min	48 hrs	2 h/bar
d 160 / d 225	below 10°C	60 min	48 hrs	2 h/bar

**IV. Special instructions****General information:**

Before start of operation, pipelines must always be carefully flushed in order to remove residual solvent vapours. Tangit ABS is ready for use and must under no circumstances be diluted.

Tangit ABS affects ABS. Pipes and fittings should therefore not be exposed to spilled adhesive / cleaner or to the tissue paper used for cleaning. Tightly close containers no longer in use in order to avoid solvent evaporation and thickening.

Remove the skin of dried-up adhesive. Strip off thickened adhesive adherent to the brush with dry tissue paper. Cleaned brushes must be dry prior to further use.

**Installation:**

Installation at low temperatures requires utmost care. At temperatures below +5°C; pipes and fittings tend to be more vulnerable to impact (embrittlement) so that long-term exposure to solvent vapours may result in damage to the system. Since Tangit ABS cures physically by evaporation, hardening may be slowed down considerably. Special installation techniques are therefore required at temperatures below +5°C. For this purpose, pipe ends and sockets to be bonded are warmed to +25 to +30°C by means of a suitable hot-air blower (explosion-proof) and then bonding is done as described above. The finished joint must be kept at +25 to +30°C for approx. 10 min.

**Please note:**

The installation of pressure pipes and fittings made of ABS requires expertise in the use of these materials. The instructions given here are therefore only meant to support well-trained staff in their work. Please make sure to observe the installation instructions of the pipe and fitting manufacturers.

**In order to ensure traceability of the Tangit ABS batch(es) used, the batch number(s) must be indicated in the final inspection report. These numbers can be found on labels included in every shipping carton.**

**Safety measures:**

Tangit ABS is flammable. Solvent vapours are heavier than air and may form explosive mixtures.

Therefore ensure sufficient airing and ventilation during application and drying. No smoking and no welding in the working area and in the rooms adjacent to it! No open light or fire, avoid any sparking! Accumulated solvent vapours and explosive mixtures must be removed prior to welding.

Fill the pipes with water, flush and purge them well. Do not close/seal the pipes while drying.

Prolonged inhalation of solvent vapours may be injurious to health. In order to minimize exposure to solvent vapours, keep used tissue paper in closed containers (e.g. buckets with lids). As precaution, protective gloves should be worn to avoid skin contact and maximum cleanliness should be observed (repeatedly wash hands during work and use a greasy skin cream or emulsion).

In case of contact with the eyes, rinse thoroughly with water and obtain medical advice. Immediately take off any clothing stained with adhesive.

For further information see the leaflets and accident prevention regulations of the employers' liability insurance associations and the safety data sheets. Full information on safety requirements and workplace hygiene in connection with Tangit can be found in the leaflet "Working with Tangit".

**Storage:**

For practical reasons, Tangit should not be stored at temperatures below + 5°C since this leads to a higher viscosity and thickening of the adhesive, thus affecting its workability. After conditioning at room temperature and thorough stirring, the temperature-induced viscosity increase and thickening is reduced again.

**Shelf life:**

If stored at +20°C, shelf life is at least 24 months from the date of filling. Date of manufacture and batch number are displayed at the bottom of the container.

**Disposal:**

Product remains must be disposed of as special waste. Only recycle well-emptied containers with dried-up adhesive residues and free of solvent vapours.

The respective code of the European Waste Catalogue (EWC) can be enquired from the manufacturer.

**Internet:**

[www.tangit.com](http://www.tangit.com)

This Technical Data Sheet is based on our present knowledge and experience.

**Please note:**

The above information can only be of a general nature. As materials and conditions may vary with each intended application and thus are beyond our influence, we recommend that the user always carries out sufficient tests to ensure our products are suitable. No liability can be accepted for particular application results based on the information and instructions given in this leaflet.

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