COSHH data sheet

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HS125 and HS250 Solvent cement

The information contained within this data sheet has been supplied by the product manufacturer Unecol

Description

Special solvent cement for joining rigid PVC pipes and accessories pressure systems, according to BS EN 14814.and BS EN 14680 Specifically indicated to bond thermoplastic piping systems that conform to BS EN 1452, BS EN 1455, BS EN 1566 and BS EN 1329.
Adhesive with CE Marking for thermoplastic piping systems for fluids under pressure (PN16).
Certificated by CSTB – "Certifié CSTB Certified" against BS EN 14814 for thermoplastic piping systems for fluids under pressure for PN 16.
Certified by BSI (UK) – Kitemark against BS EN 14680 for thermoplastic for non pressure piping systems, and BS 14814 for thermoplastic piping systems for fluids under pressure for PN 16. Certified by laboratory Santé Environnement Hygiène de Lyon (CARSO) for use in potable water pipeline.
Certified potable water WRAS (UK).

Type

Based on a polymer resin of Poli (Vinyl Chloride) PVC, organic solvents and thixotropic agents.

Properties

- Very high initial forging speed.
- High resin content gives a good filling capacity in diametrical gaps.
- Gel consistency and excellent fluidity.
- High thixotropy index – prevents it from dripping upon application.
- Acts as a real chemical welding system for PVC, due to its composition.
- Easy to apply; it does not run or form "tears" inside the fixed pipes.
- The fixed joints present resistance and ageing characteristics comparable to those of rigid PVC.

Uses

Specifically indicated for:

- Bonding rigid PVC-U pipes and accessories in pressure systems up to 16 PN according to BS EN 14814 "Adhesives for thermoplastic piping systems for fluids under pressure. Specifications". Specifically indicated to bond thermoplastic piping systems that conform to BS EN 1452 and BS EN 1329.
- Bonding pipes and accessories in waste systems according to the following standards:
    - PVC-U plastics piping systems for soil and waste discharge (low and high temperature) EN 1329.
    - ABS plastics piping systems for soil and waste discharge (low and high temperature) EN 1455.
    - PVC-C plastics piping systems for soil and waste discharge (low and high temperature) EN 1566.

Technical characteristics

Properties of packaged material:

Viscosity (Brookfield RVT, 20 rpm, Sp.3)	Approx. 8.000 mPa s
Solid content	Approx. 20. %
Relative density	Approx. 0.9 g/ml
Flammability	Highly flammable
Open time (at 23ºC)	Maximum 2 minutes
Maximum Gap Filling Capacity	+ 0.6 mm
Pressure Drying time (in normal conditions)	24 h
Shear strength (1 h drying time)	> 0,4 MPa
Shear strength (24 h drying time)	> 1,5 MPa
Shear strength (20 days + 4 days drying time)	> 7,0 MPa
Pressure resistance (20 ºC)	51,2 bar
Pressure resistance (40 ºC)	20,8 bar
Application temperature	-5 to +30ºC
Service temperature	-5 to +50ºC

Instructions for use

First, pipes have to be prepared: cut them at a right angle, beveling edges at a 15º angle. Clean and degrease the pipe and sleeve with absorbent paper soaked with PVC Cleaning Solvent. Apply the adhesive with a brush from the inside outwards first to the socket, and then to the pipe. Insert the pieces immediately without twisting, and always within 2 minutes of applying the cement. Keep totally still for 30 seconds while the initial forging takes
place. Remove any excess of cement with absorbent paper soaked with PVC Cleaning Solvent. The bond should not be manipulated in the following 10 minutes. For temperatures below 10 ºC, wait for almost 15 minutes to manipulate the bonded pieces.
PVC TF 7000 cures in 8 hours depending on the climatic conditions, but it is recommended to wait 24 hours before applying pressure values higher than 1,5 atmospheres, and 10 or 12 hours before submersing the pipes into the trenches. If the system has to withstand pressure before 24 hours of drying, wait 1 hour for each bar the system has to resist.
Generally, the following cure and pressure conditions are recommended:

<table>
<tr><td>Systems with up to 10 bars of pressure and pipes
of up to 90 mm</td><td rowspan="2">Application
temperature
+ 5ª C to +35ºC</td><td rowspan="2">Drying time reduced to 1 hour</td></tr>
<tr><td>Waste Systems</td></tr>
<tr><td colspan="2">Other systems</td><td>Normal drying time 24 hours</td></tr>
</table>

Capacity

The following table shows the quantities of solvent cement and cleaning solvent necessary for 100 bonds of the diameters indicated:

Diameter	Adhesive (L)	Cleaner (L)	Diameter	Adhesive (L)	Cleaner (L)
32	0.8	0.5	110	8.0	1.7
40	1.1	0.7	140	13.0	2.1
50	1.5	0.9	160	19.0	2.5
63	1.7	1.1	225	26.0	4.5
75	2.2	1.3	280	38.0	6.5
90	4.0	1.4	315	52.0	10.2

Storage

Stored in its original container and in a cool, dry place, this product maintains its properties for at least 2 years (under evaluation). Considering it is a flammable product, necessary precautions must be taken, and it should be stored away from flames, sparks and heat, in non-smoking areas.

Cleaning

Fresh product is removed with a cloth dampened with PVC Cleaning Solvent. PVC TF 7000 attacks rigid PVC, so pieces should not come into contact with the solvent cement.

Safety precautions

For further information, see product safety sheets.
