

**SUMMARY SHEET FOR PU BONDING**

System / Rec. Temp Range (°C)	Best Bond Temp Range (°C)	Bond Strength (Dry)	Water Resis.	Creep Resis.	Impact Resis.	Max Heat Resistance (4) (5)	Main Application Areas	Comments
Cilbond 41 >20°C	20°-90°C plus limited use up to 135°C	100% RT (1) (2)	Fair	Good	Good	ca. 125°C	Cold cast, PU, Quasi prepolymers, sprayable systems, foams generally	Very fast amine PU cures may be difficult to bond
Cilbond 41 + Cilcure B @ 100:5 >10°C	20°-200°C	100% RT (6)	Good	Excel.	Fair	ca. 140°C	Cold cast, PU, Quasi prepolymers, sprayable systems, foams generally. Improved adhesion to FBE, etc. Best system for rotational casting of large rollers	Limited open time. Bonds fast cure amines Bonds PVC CR, CSM & some NBR Exceptional boiling water resistance
Cilbond 45SF 70-180°C	70°-180°C	100% RT (2) (3)	Fair	Good	Excel.	ca. 130°C	High temperature bonding of all hot cast PU's. TPU	Best bonds after pre-bake. Exceptional pre-bake resistance
Cilbond 48 20°-180°C	20°-180°C	100% RT (1), Vulkollan E95T / E300	Good	Excel.	Good	ca. 140°C	Cold cast, quasi prepolymers, Vulkollan, hot-cure prepolymers.	Fast-drying, pre-bake resistance up to 24 hours at 105°C
Cilbond 49SF 70-180°C	70°-180°C	100% RT (2)(3)	Excel.	Very Good	Excel.	ca. 145°C	High temperature bonding to cast PU and TPU where hydrolysis resistance required	For best bonds CB49SF must be pre-baked
Cilbond 49SF + Cilcure B @ 100:10	40°-140°C	100% RT (6)	Excel.	Excel.	Very Good	> 150°C	High temp resistance and good solvent resistance. Best system for rotational casting of small to medium sized rollers	Limited pre-bake. Limited storage of coated metals

- (1) 100% Rubber-Tear (RT) with Cold Cure PU > 800 N / 25mm peel.  
 (2) 100% Rubber-Tear (RT) with Adiprene® L-83/MBOCA cure > 1500 N / 25mm peel.  
 (3) 100% Rubber-Tear (RT) with Adiprene® L-167/MBOCA cure > 2000 N / 25mm peel.  
 (4) Typical figure only. The PU and method of bond formation influence maximum heat resistance.  
 (5) For the ultimate in heat resistance use Cilbond 33A / 33B  
 (6) 100% RT with (1) or (2) or (3).

Adiprene® is a registered trademark of Chemtura Corp.

Vulkollan® is a registered trademark of Bayer

**CHEMICAL INNOVATIONS LIMITED**

217 Walton Summit Road, Walton Summit Centre,  
 Bamber Bridge, Preston, PR5 8AQ, Lancashire, England.  
 Telephone: 01772 322888 (UK only) +44 1772 322888 (International)  
 Fax No: 01772 315853 Order Dept Fax No: 01772 311844  
 Email: sales@polycil.co.uk Web Site: www.polycil.co.uk

