

**PRELIMINARY  
DATA SHEET**

**STARTUP PROMOTER SU-P42**

improve adhesion of instant adhesives  
for difficult to bond plastics & rubbers

**PRODUCT DESCRIPTION**

**FOTOPOLYMER START-UP PROMOTER SU-P42** is a single component, non-CFC solvent based adhesion PROMOTER formulated to improve the adhesion of **FOTOPOLYMER** instant adhesives on difficult to bond plastics and rubbers such as polyethylene, polypropylene, fluropolymer, silicone, thermoplastic rubber, etc. **START-UP PROMOTER SU-P42** also accelerates fixturing and curing speed. **START-UP PROMOTER SU-P42** is formulated to be environmentally friendly with non ozone depleting content.

**TYPICAL PROPERTIES**

Chemical type	Aliphatic amine solvent PROMOTER
Solvent Base	Heptane
Appearance	Clear liquid
Viscosity @ 25°C	<2
Specific gravity	0.68
Flash point, °C	-1 (HIGHLY FLAMMABLE)
Drying Time @ 20°C, seconds	30
On Part Life, minutes	30

**TYPICAL PERFORMANCE**

**TYPICAL FIXUTRING & CURING SPEED**

Fixture time and cure speed achieved as a result of using **START-UP PROMOTER SU-P42** depend on adhesive used and substrate bonded. **START-UP PROMOTER SU-P42** also accelerates fixturing and curing speed. Fixturing time on most primed substrates is less than five seconds but 24 hours at room temperature (22° C) should be allowed for adhesive to develop maximum bond strength.

**SHEAR STRENGTH BY ADHESIVE TYPES**

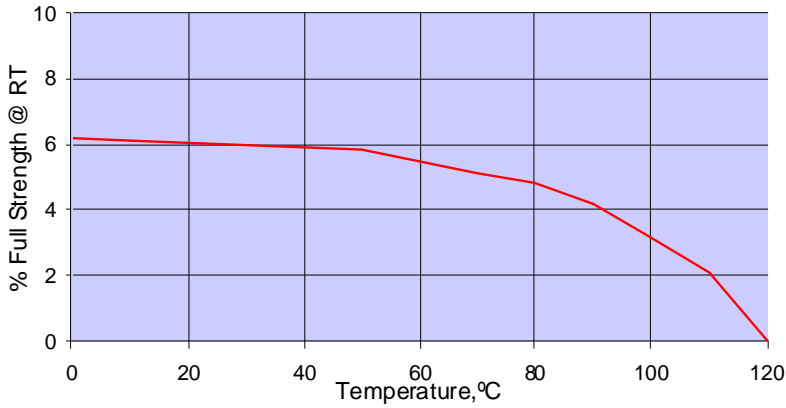
Ethyl instant adhesives are best suited for bonding plastics and rubbers. Methyl instant adhesives are best suited for bonding metals. An overview of shear strength obtained by ethyl and methyl instant adhesives is stated below. **START-UP PROMOTER SU-P42** is not recommended for use with gel type of instant adhesives. **START-UP PROMOTER SU-P42** is not recommend for peel loading. Consult adhesive's Technical Datasheet for details.

Shear strength after 24 hr @ 25°C &  
treated with **START-UP PROMOTER**  
**SU-P42**, N/mm<sup>2</sup> (PSI)

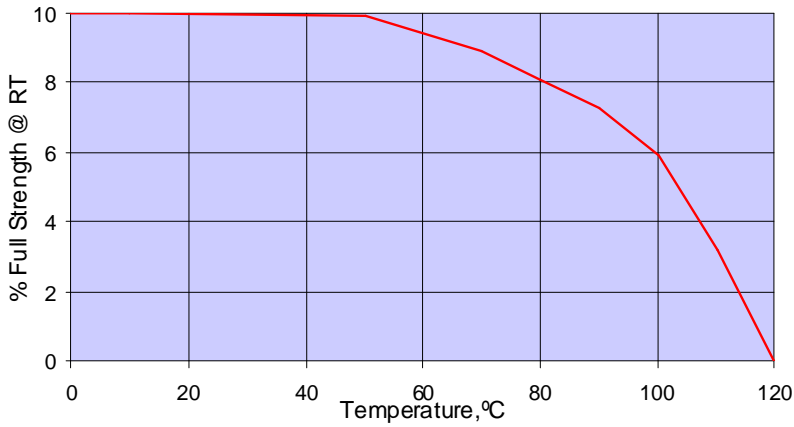
	<b>Ethyl Instant Adhesives</b>	<b>Methyl Instant adhesives</b>
Polypropylene	3 to 10 (435 to 1450)	2 to 7 (290 to 1015)
Polypropylene & Steel	4 to 10 (580 to 1450)	5 to 15 (725 to 2175)
High density polyethylene,	1 to 4 (145 to 580)	-
Thermoplastic rubber	2 to 6 (290 to 870)	-
Polytetrafluorethylene	1 to 6 (145 to 870)	-

### HOT STRENGTH

Polypropylene to Polypropylene treated with **START-UP PROMOTER SU-P42** & bond with ethyl instant adhesive

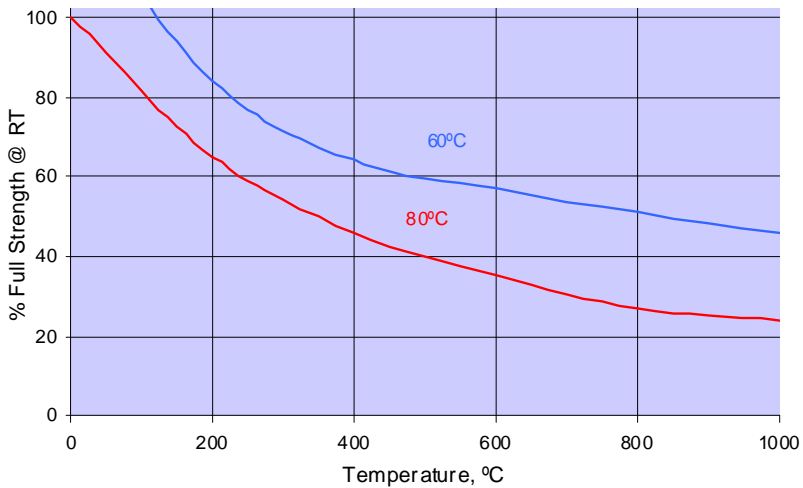


Polypropylene to Steel treated with **START-UP PROMOTER SU-P42** & bond with ethyl instant adhesive



### HEAT AGING

Polypropylene to Polypropylene treated with **START-UP PROMOTER SU-P42** & bond with ethyl instant adhesive



## ENVIRONMENTAL AGING

Polypropylene to Polypropylene treated with **START-UP PROMOTER SU-P42** & bond with ethyl instant adhesive

Aging condition	% of Initial Strength
After 100 hours @ 40°C & 95% RH	100
After 500 hours @ 40°C & 95% RH	100
After 1000 hours @ 40°C & 95% RH	100

## DIRECTION FOR USE

1) Apply adhesion promoter to one of the bonding surfaces by brushing or spraying. Apply on the surface which is smoother, less porous or more difficult to bond.

Note: Contaminated surfaces may need repeated treatment or special degreasing to remove any contamination prior to activation. If both surfaces are difficult to bond, apply adhesion promoter on both surfaces. For large gaps or faster fixturing, apply adhesion promoter on both surfaces. As the solvent base can affect certain plastics or coatings, check all surfaces for compatibility.

2) Allow sufficient time for solvent to evaporate under ventilation. Some adhesion promoters might leave a wet coating after solvent evaporate.

3) After treatment, parts should be bonded within the on-part life. Avoid any surface contamination before bonding.

4) Apply the adhesive to one or both surfaces and assemble parts immediately.

Note: If adhesion promoter is applied on one surface only, apply the adhesive to the other unprimed surface. Minimising the delay in assemble maximises consistency in performance.

5) Assemble with sufficient pressure to spread the adhesive thinly. When possible, shift the surfaces slightly for a few seconds to distribute the adhesive and to achieve maximum activation.

6) Maintain pressure until handling strength is achieved. Fixturing strength varies with part geometry, surface area, tolerances, etc.

## HANDLING

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.**

When dispensing this material from a pressurized system, only nitrogen or argon should be used. Please check local regulations regarding the use of flammable liquids in the workplace. For example, special care must be taken to avoid contact of the activator or its vapour with naked flame or any electrical equipment that is not flame proofed.

**For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).**

## STORAGE

This activator is classified as **highly flammable** and must be stored in an appropriate manner in compliance with relevant regulations. Do not store near oxidising agents or combustible materials. Keep container sealed when not in use. Store in a cool, dry location between 8°C to 28°C unless otherwise labelled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused material, do not return any material to its original container.

## FOR INDUSTRIAL USE ONLY. KEEP AWAY FROM CHILDREN.

The data contained herein may be reported as a typical value and/or range. Values based on actual test data are verified on periodic basis. These suggestions and data are based on information we believe to be reliable and accurate, but no guarantee of their accuracy is made. HERNON ASIA PTE LTD. shall not be liable for any damage, loss or injury, direct or consequential arising out of the use or the inability to use the product. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine whether the product is of satisfactory quality and suitability for their operations, and the user assumes all risk and liability whatsoever, in connection therewith.

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