

### Test Method:

Mactac tape was applied to both the skin side and the cut side of the foam substrate using 50% Compression and a weighted 5# roller.

All tape was applied at room temperature, and peels were conducted manually at an approximate rate of 12"/sec.

**Peel testing** was measured at intervals of 30 mins, 24 hours, 72 hours, and 2 weeks at Room temperature.

**Accelerated aging** - 1 week @ 140°F was performed to simulate long term performance for the PSA on a given foam substrate.

### K-Flex is a leading manufacturer of elastomeric foams.



General  
Gasketing



Appliance



Tapes &  
Stripping



Marine



Automotive  
General Sealing, HVAC,  
NVH Applications,  
Door Panel Assemblies



Mass Transit



Heavy  
Machinery



Sports Equipment  
& Padding

### Adhesives

|           |                                             |
|-----------|---------------------------------------------|
| MP 593XT  | - High-tack, High-shear,<br>Rubber Adhesive |
| MP 899FBT | - Rubber Foam Bonding<br>Adhesive           |
| MP 410    | - NEW! High-peel<br>Acrylic Adhesive        |



## Foam Bonding Study: K-Flex Performance Foams

|                   |           |                | "++++" = Foam Destruction    |          |               |           | "+++" = Very Aggressive |          |                         | "++" = Agressive |                                    | "+" = Mild |         | "-_" = Poor |        |         |         |          |        |        |
|-------------------|-----------|----------------|------------------------------|----------|---------------|-----------|-------------------------|----------|-------------------------|------------------|------------------------------------|------------|---------|-------------|--------|---------|---------|----------|--------|--------|
|                   |           |                | "SL P" = Slight Picking <20% |          |               |           | "P" = Picking 20-50%    |          | "CF" = Cohesive Failure |                  | "CF&P = Cohesive Failure & Picking |            |         |             |        |         |         |          |        |        |
|                   |           |                | AB-10                        |          | GV            |           | 41N                     |          | 42N                     |                  | HT                                 |            | 41E     |             |        |         |         |          |        |        |
|                   |           |                | Nitrile-PVC Blend            |          | SBR-EVA Blend |           | NBR-PVC-CR Blend        |          | NBR-PVC-CR Blend        |                  | EPDM                               |            | EPDM    |             |        |         |         |          |        |        |
|                   |           |                | Formula                      | Dwell    | Skin          | Cut       | Skin                    | Cut      | Skin                    | Cut              | Skin                               | Cut        | Skin    | Cut         |        |         |         |          |        |        |
| Rubber Adhesives  | MP-593XT  | 30 min @ RT    | ++ (SL P)                    | +++      | -             | +++       | +                       | (SL P)   | +                       | (SL P)           | +++                                | +          | (SLP)   | +++         | +      | (SLP)   |         |          |        |        |
|                   | MP-593XT  | 24 hour @ RT   | +                            | (P)      | ++++          | +++       | +++                     | +        | (SL P)                  | ++               | +                                  | (SLP)      | ++++    | +           | (P)    | ++++    | +       | (P)      |        |        |
|                   | MP-593XT  | 72 hours @ RT  | ++++                         | +++      | ++++          | +++       | ++++                    | +        | (SL P)                  | +++              | +                                  | (SLP)      | ++++    | +           | (P)    | ++++    | +       | (P)      |        |        |
|                   | MP-593XT  | 2 Weeks @ RT   | ++++                         | ++ (P)   | ++++          | +++       | ++++                    | +        | (SL P)                  | +++              | +                                  | (SLP)      | ++++    | +           | (P)    | ++++    | +       | (P)      |        |        |
|                   | MP-593XT  | 1 week @ 140°F | +++ (CF)                     | +        | (CF)          | ++++      | +++                     | +        | (CF&P)                  | +                | (CF)                               | ++ (CF)    | +       | (SLP)       | ++++   | +       | (P)     | +++ (CF) | -      | (P)    |
|                   | MP-899    | 30 min @ RT    | ++++                         | +        | (SL P)        | ++++      | +++                     | ++++     | +                       | (SL P)           | ++                                 | ++         | ++++    | +           | (SL P) | +++     | +       | (SL P)   |        |        |
|                   | MP-899    | 24 hour @ RT   | ++++                         | +(P)     | ++++          | +++       | +++                     | +        | (SL P)                  | +++ (CF)         | +                                  | (SL P)     | ++++    | +           | (SL P) | ++++    | +       | (SL P)   |        |        |
|                   | MP-899    | 72 hours @ RT  | ++++                         | +        | (P)           | ++++      | +++                     | +++ (CF) | +                       | (SL P)           | +++ (CF)                           | +          | (SL P)  | ++++        | +      | (P)     | ++++    | +        | (P)    |        |
|                   | MP-899    | 2 Weeks @ RT   | ++++                         | +++      | ++++          | +++       | +++ (CF)                | +        | (SL P)                  | +++ (CF)         | +                                  | (SL P)     | ++++    | +++         | ++++   | +++     | +++     | +++      |        |        |
|                   | MP-899    | 1 week @ 140°F | +++ (CF)                     | +        | (CF)          | ++ (CF/P) | +                       | (CF/P)   | ++ (CF)                 | ++ (CF)          | ++ (CF)                            | ++ (CF)    | ++ (CF) | ++++        | +      | (P)     | ++ (CF) | ++ (CF)  |        |        |
| Acrylic Adhesives | MP410 LCW | 30 min @ RT    | +                            | (SL P)   | +++           | +++       | +++                     | +        | (SL P)                  | +                | (SL P)                             | ++         | +++     | +           | +      | (SL P)  | +       | +        | (SL P) |        |
|                   | MP410 LCW | 24 hour @ RT   | +++                          | +++      | +++           | ++++      | +                       | (SL P)   | +                       | (SL P)           | +++                                | +++ (CF)   | +++     | +           | (SL P) | +       | +       | +        | (SL P) |        |
|                   | MP410 LCW | 72 hours @ RT  | ++++                         | +++      | ++++          | +++       | +                       | (P)      | +                       | (P)              | +++                                | +++ (CF)   | +++     | +           | (P)    | +       | +       | +        | (SL P) |        |
|                   | MP410 LCW | 2 Weeks @ RT   | ++++                         | +++      | ++++          | +++       | +++                     | +        | (CF&P)                  | ++               | +                                  | (CF&P)     | ++++    | +           | (P)    | ++      | +       | +        | (SL P) |        |
|                   | MP410 LCW | 1 week @ 140°F | ++++                         | +        | (SL P)        | ++++      | +++                     | +        | (CF)                    | -                | (CF)                               | -          | (CF)    | ++++        | +      | (P)     | ++ (CF) | +        | (SL P) |        |
|                   | MP410 HCW | 30 min @ RT    | ++++                         | +++      | ++++          | +++       | +++                     | +++      | +++                     | ++               | +++                                | +          | (SL P)  | +           | (SL P) | +       | +       | +        | (SL P) |        |
|                   | MP410 HCW | 24 hour @ RT   | ++++                         | +++      | ++++          | +++       | ++++                    | +++      | ++                      | +++              | +++                                | +++        | ++++    | +           | (P)    | ++ (CF) | +       | +        | (SL P) |        |
|                   | MP410 HCW | 72 hours @ RT  | ++++                         | +++      | ++++          | +++       | ++++                    | +++      | +++                     | +++              | +++                                | +++        | ++++    | +++         | +++    | ++ (CF) | +       | +        | (SL P) |        |
|                   | MP410 HCW | 2 Weeks @ RT   | ++++                         | +++      | ++++          | +++       | ++++                    | +++      | +++                     | +++              | +++                                | +++        | ++++    | +++         | +++    | ++ (CF) | +       | +        | (P)    |        |
|                   | MP410 HCW | 1 week @ 140°F | +++ (CF)                     | +++ (CF) | ++++          | +++       | +                       | (CF)     | +                       | (CF)             | -                                  | (CF)       | -       | (CF)        | ++++   | +++     | +       | (CF)     | +      | (SL P) |
|                   |           |                | Migration @140°F             |          |               |           | Migration @140°F        |          |                         | Migration @140°F |                                    |            |         |             |        |         |         |          |        |        |

|                   |           | "++++" = Foam Destruction    |       |                  |         | "+++" = Very Aggressive |          |                         |          | "++" = Aggressive |          | "+" = Mild                         |          | "- " = Poor |     |
|-------------------|-----------|------------------------------|-------|------------------|---------|-------------------------|----------|-------------------------|----------|-------------------|----------|------------------------------------|----------|-------------|-----|
|                   |           | "SL P" = Slight Picking <20% |       |                  |         | "P" = Picking 20-50%    |          | "CF" = Cohesive Failure |          |                   |          | "CF&P = Cohesive Failure & Picking |          |             |     |
|                   |           | 40P                          |       | K43N             |         | 40E                     |          | G                       |          | 41P               |          | 41PA                               |          |             |     |
|                   |           | Nitrile-PVC Blend            |       | NBR-PVC-CR Blend |         | EPDM                    |          | Nitrile-PVC Blend       |          | Nitrile-PVC Blend |          | Nitrile-PVC Blend                  |          |             |     |
|                   |           | Formula                      | Dwell | Skin             | Cut     | Skin                    | Cut      | Skin                    | Cut      | Skin              | Cut      | Skin                               | Cut      | Skin        | Cut |
| Rubber Adhesives  | MP-593XT  | 30 min @ RT                  | ++++  | + (SL P)         | -       | +                       | ++++     | - (SL P)                | ++++     | + (SL P)          | -        | + (P)                              | +++      | + (SL P)    |     |
|                   | MP-593XT  | 24 hour @ RT                 | ++++  | + (SL P)         | +       | +                       | ++++     | + (SL P)                | ++++     | + (SL P)          | ++++     | + (P)                              | +        | + (P)       |     |
|                   | MP-593XT  | 72 hours @ RT                | ++++  | + (SL P)         | + (CF)  | - (SL P)                | ++++     | + (SL P)                | ++++     | + (SL P)          | ++++     | + (P)                              | ++       | + (P)       |     |
|                   | MP-593XT  | 2 Weeks @ RT                 | ++++  | + (SL P)         | + (CF)  | - (SL P)                | ++++     | + (P)                   | ++++     | + (P)             | ++++     | + (P)                              | ++       | + (P)       |     |
|                   | MP-593XT  | 1 week @ 140°F               | ++++  | +++              | ++ (CF) | - (CF)                  | ++++     | + (P)                   | ++++     | + (P)             | +++      | + (P)                              | +++ (CF) | +++ (CF)    |     |
|                   | MP-899    | 30 min @ RT                  | ++++  | + (SL P)         | +       | -                       | ++++     | + (SL P)                | ++++     | + (SL P)          | ++++     | + (SL P)                           | -        | + (SL P)    |     |
|                   | MP-899    | 24 hour @ RT                 | ++++  | + (SL P)         | ++ (CF) | + (SL P)                | ++++     | + (SL P)                | ++++     | + (P)             | ++++     | + (P)                              | + (P)    | + (SL P)    |     |
|                   | MP-899    | 72 hours @ RT                | ++++  | + (SL P)         | ++ (CF) | +                       | ++++     | + (SL P)                | ++++     | + (P)             | ++++     | + (P)                              | +++      | + (P)       |     |
|                   | MP-899    | 2 Weeks @ RT                 | ++++  | +++              | ++ (CF) | + (CF/P)                | ++++     | + (SL P)                | ++++     | ++ (CF)           | ++++     | +++                                | +++      | + (P)       |     |
|                   | MP-899    | 1 week @ 140°F               | ++++  | +++              | ++ (CF) | ++ (CF)                 | ++++     | + (CF)                  | +++      | + (CF)            | +++ (CF) | ++ (CF)                            | + (CF)   | + (CF/P)    |     |
| Acrylic Adhesives | MP410 LCW | 30 min @ RT                  | ++++  | + (SL P)         | +       | -                       | + (SL P) | + (SL P)                | ++++     | + (SL P)          | +++      | +++                                | + (SL P) | + (SL P)    |     |
|                   | MP410 LCW | 24 hour @ RT                 | ++++  | + (SL P)         | + (CF)  | + (CF)                  | + (SL P) | + (SL P)                | ++++     | + (SL P)          | +++      | +++                                | + (SL P) | + (SL P)    |     |
|                   | MP410 LCW | 72 hours @ RT                | ++++  | + (P)            | + (CF)  | + (CF)                  | + (SL P) | + (SL P)                | ++++     | + (P)             | ++++     | +++                                | ++++     | + (P)       |     |
|                   | MP410 LCW | 2 Weeks @ RT                 | ++++  | + (P)            | + (CF)  | + (CF)                  | + (P)    | + (SL P)                | ++++     | + (P)             | ++++     | +++                                | ++++     | + (P)       |     |
|                   | MP410 LCW | 1 week @ 140°F               | ++++  | ++++             | + (CF)  | - (CF)                  | ++++     | + (SL P)                | ++++     | + (CF)            | ++++     | + (CF)                             | ++++     | + (CF&P)    |     |
|                   | MP410 HCW | 30 min                       | ++++  | + (SL P)         | ++      | +                       | + (SL P) | + (SL P)                | ++++     | + (SL P)          | + (SL P) | + (SL P)                           | +        | +++         |     |
|                   | MP410 HCW | 24 hour                      | ++++  | + (P)            | ++      | + (CF)                  | +++      | + (SL P)                | ++++     | + (SL P)          | +++      | + (P)                              | +++      | +++         |     |
|                   | MP410 HCW | 72 hours                     | ++++  | +++              | ++ (CF) | + (CF)                  | +++      | + (P)                   | ++++     | + (P)             | ++++     | +++                                | ++++     | +++         |     |
|                   | MP410 HCW | 2 Weeks                      | ++++  | +++              | ++ (CF) | + (CF)                  | +++      | + (P)                   | ++++     | +++               | ++++     | +++                                | ++++     | +++         |     |
|                   | MP410 HCW | 1 week @ 140°F               | ++++  | ++++             | - (CF)  | - (CF)                  | ++++     | + (P)                   | + (CF&P) | - (CF)            | ++++     | + (CF)                             | +++ (CF) | + (CF)      |     |
|                   |           |                              |       | Migration @140°F |         |                         |          | Migration @140°F        |          |                   |          | Migration @140°F                   |          |             |     |

Mactac is ISO9000-2000 certified.

Mactac is a member of the following organizations:

Gasket Fabricators Association

National Association of Graphic and Product Identification Manufacturers, Inc. (GPI)

Pressure Sensitive Tape Council (PSTC)

