

Technical Data Sheet

NASA - V

1. Description

2 Layered thermoplastic polyurethane hotmelt film.

2. Characteristics

<u>NASA-V</u> is a 2-layered TPU hotmelt film. Top layer is TPU which has high physical properties and heat resistance, so it protects under layer and textiles from the external severe abrasion and heat of pressing process. Under layer is a TPU- based hotmelt which shows the excellent adhesion to various substrates like polyester, polyamide and natural fibers etc.

These TPU and hotmelt layers are co-extruded through multi-layer extruder. Unlike laminated films, co-extruded films are inherently not de-laminated by external, continuous stress.

3. Typical properties

Appearance	Hotmelt/TPU/release paper
300% Modulus	Appr. 60kgf/cm2
Elongation	> 500%
Tensile strength	> 300kgf/cm2
Width available	47 inch
Hotmelt Melting pt. In DSC	114 ~ 122°C by 2nd scan
Hotmelt Melt Flow Index	8~14 g/10min (177°C, 2.16kgf)

4. Application

<u>NASA-V</u> can be used under general laminating condition using hot-press machine. The exact working condition should be taken through some experimentals varing temperature, pressure and time.

<Example condition>

Hot press surface temp.: 135~140°C

Time: 30~35sec Pressure: 60kgf/cm2



5. Packaging

Rolls in ordered length.

6. Storage

Store at a dry and cool place.

Keep it out of sun-light(UV) Without opening the packaging

Shelf life: 12 month after production(Without opening the packaging)

7. Disposal

<u>NASA-V</u> can be recycled by approved companies and facilities. Release paper can be treated by local recycling company. (Do not put into TPU recycling process.)

8. Safety

We consider <u>NASA-V</u> does not have serious problem to workers. But be careful when handling rolls because they are very heavy. Please refer to MSDS for more detailed information.