nanoGriptech®
GECKO-INSPIRED ADHESIVES

Product Information

Setex GeckoTape™
by nanoGriptech

Setex GeckoTape™ is powered by nanoGriptech's gecko-inspired technology. The material's microfiber surface is designed to simulate the microscopic hair or *setae* of a gecko's feet for ultra-clean, repeatable adhesive solutions for the toughest consumer and industrial challenges.

Features

- Dry/glue-free/non-tacky
- Residue-free removal
- Reusable
- Customizable adhesive strength (0-40 N/cm^2 shear & 0-2 N/cm2 peel)
- Directional adhesion or friction performance may be possible for select applications
- Available in sheets, die cut pieces & double-sided microstructure tape
- Maximum sheet size is 8"x16"; custom sheets available in smaller sizes
- Microstructures range from 10-150µm in height & 10-150µm in diameter
- Application temperature range of -20°C to 100°C

Product Profile

A: Release liner

B: Setex GeckoTape microfibers

C: Customer defined carrier

Carrier options include:

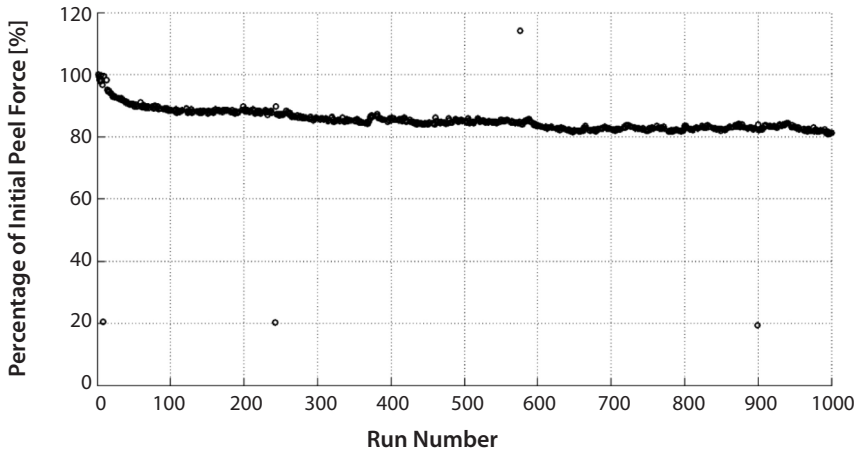
- PET film
- TPU film
- Foam
- Pressure sensitive adhesive

Adhesive Performance

5lb pre-load, 1 minute dwell time, retraction speed of 1mm/s, on stainless steel substrate.

Products	Description	Shear Strength (N/cm^2)	180°Peel Strength (N/cm)	90°Peel Strength (N/cm)
DA 910/ DA 110	High strength dry adhesive microfiber	30-40	1-2	0.6-0.8
DA 210	Medium strength dry adhesive microfiber	20-30	0.5	0.2-0.4
DA 310	Low strength dry adhesive microfiber	10	NA	NA

Performance over 1000 peel cycles



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Guidelines and Recommendations

Setex GeckoTape is supplied with fiber tips in contact with a release film. This film should be removed before evaluation of the samples and replaced when samples are not in use.

For best performance, adhesive samples should be applied to a clean, dry surface, free ofany oil ordebris.

The strength of the dry adhesive is dependent onthe number of microfiber tips in contact withthe surface and the contact time. We recommend applying with firm pressure to achieve good surface contact.

For optimal adhesive strength avoid touching the microfiber surface. We recommend handling the microfiber samples using gloves to avoid contamination.

How to Clean Contaminated Microfibers

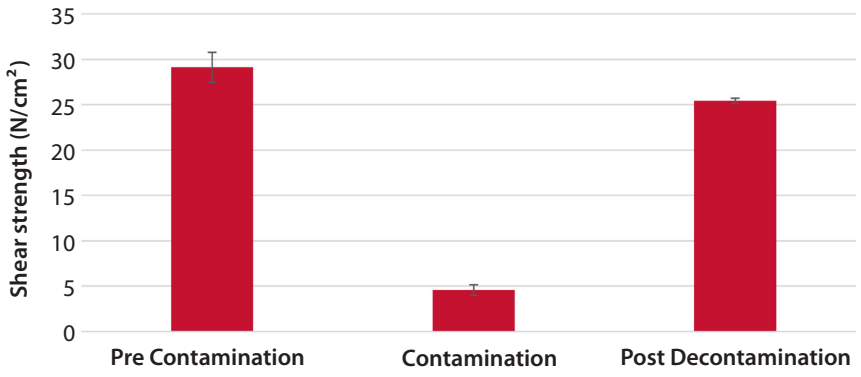
If the microfiber surface becomes contaminated, it can be cleaned.

If contamination is mild (e.g., small amount of dust or debris), it can be refreshed by blotting with a low-medium tack pressure sensitive adhesive tape, such as Scotch® tape. The contaminant will stick to the tacky adhesive and lift off the microfiber surface.

If the contamination consists of heavier amounts of debris, or if the microfiber surface is contaminated by skin oils, it can be refreshed by rinsing the surface with isopropyl alcohol (typically 70%) and wiping with a lint-free cloth. Allow to dry completely.

For heaviest contaminants, the surface can be lightly cleaned with basic dish soap and water.

Allow the surface to dry completely before reapplying the microfiber surface to the mating surface.



Setex was contaminated with ISO Grade 12103-1 A2 Fine Test Dust. The decontamination protocol used to remove the dust particles was to wash it thoroughly with liquid dish soap and water, then drying it under a high-speed air blower.

For more information, please contact us at info@nanogriptech.com

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91 43rd St., Suite 130
Pittsburgh, PA 15201
412.224.2136
nanogriptech.com