

Lightweight Protection and Comfort for Apparel and Accessories

NEW Dow Corning® Active Protection System S7-007

Key features and benefits

- **Impact performance**

S7-007 absorbs and dissipates energy, greatly reducing impact forces transmitted to the body.

- **Lightweight**

S7-007 is one of the lightest high-performance APS products.

- **Freedom of movement**

S7-007 is extremely flexible and will move with the body.

- **Comfort**

S7-007 is very soft and flexible, offering great fit and comfort.

- **Breathable**

S7-007 is based on an open structure, allowing natural ventilation and airflow around the body for ultimate comfort.

- **Washable**

S7-007 can be washed more than 50 times at 40°C with no loss of impact performance properties and more than 25 times at 95°C.

- **Protection at high and low temperatures**

S7-007 shows no impact performance losses at high (+40°C) and low (-20°C) temperatures.

- **Design versatility**

S7-007 is a textile. It can be cut into different shapes and sizes and integrated into garments where protection is needed.

Design choices for the Active Protection System



AV12975

The Dow Corning® Active Protection System is a premium patented “intelligent” textile technology that offers the wearer comfortable protection and allows the designer many creative choices.

Active Protection System S7-007 offers soft, flexible, and lightweight impact protection. Unlike bulky hard-armor component systems, Active Protection System S7-007 can be sewn

directly into garments and accessories. It can be cut into any desired shape, then built up in layers and integrated directly into the garment. You can easily and quickly build prototypes in-house for testing and trials. Attaching the material to the outside of the garment is not advised.

As a versatile fabric technology, it will integrate easily and quickly into standard manufacturing processes. Active Protection System S7-007 is available on rolls with a release liner.

With the Active Protection System, you can now offer your customers a truly revolutionary advancement in protective apparel. Active Protection System S7-007 particularly provides:

- >> Superior protection at medium- and high-impact energies
- >> Outstanding comfort and fit
- >> Freedom of movement
- >> Great washability
- >> Performance at high and low temperatures
- >> Breathability

Different applications will have different requirements, therefore different weights and colors of Active Protection System S7-007 can be made available to allow tailoring to specific needs. Please discuss your needs with us.

Independently tested, proven technology

Independent testing by SATRA, a UKAS-accredited laboratory, proves the Active Protection System passes the European motorcycle impact norm EN1621-1 for limbs.

SUPERIOR DEFENSE AND COMFORT

DOW CORNING®
ACTIVE PROTECTION SYSTEM

Typical properties

Dow Corning Active Protection System S7-007

Physical Characteristics

Width	1300 mm
Thickness	7 mm
Color	Different colors are available. Please let us know your requirements.
Weight	1.5 kgm ²
Rolls	~20 linear meters

Test Results and Attributes

EN1621-1 Motorcyclist limb protection standard* (50 joules)	Mean ~31 kN (2 layers)
Surface softness	Soft and flexible
Breathability	Open structure allowing airflow
Washability at 40°C**	> 50 washes
Washability at 95°C**	> 25 washes

*Tested in Dow Corning laboratories.

**Washability testing was conducted on the fabric as manufactured.

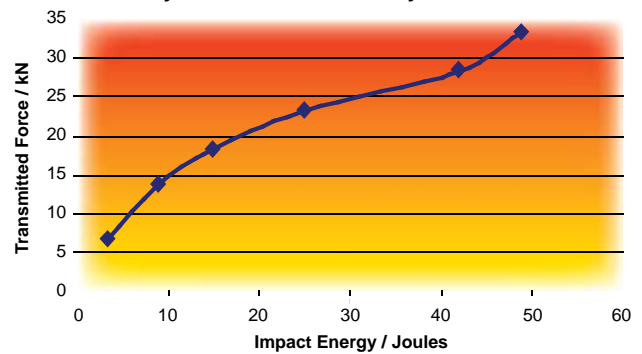
Suitable applications

Active Protection System S7-007 works at a range of different energy levels representing different types of collisions, impacts, or falls. Due to S7-007's softness, breathability, flexibility, and washability it is ideal in garments or accessories that are worn close to the skin, where comfort and movement are critical and frequent washing is necessary. These might be applications where the wearer is getting very hot or applications where protection has to be worn for long periods of time.

Examples include:

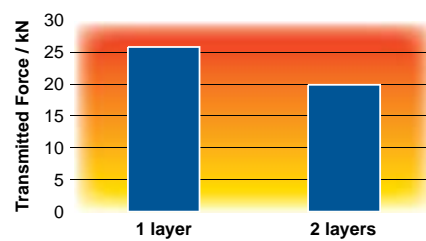
- >> Body armor for high-energy falls such as snowboarding, mountain biking, motorcycling, BMX, etc.
- >> Baselayer protection for contact sports like soccer, rugby, American football, basketball, baseball, hockey, etc.
- >> Personal protective equipment in the workplace
- >> Medical applications to protect the frail and vulnerable

Impact Protection Performance Two Layers Active Protection System S7-007



2 layers of Active Protection System S7-007 tested according to EN1621-1 impact standard at varying impact energies.

Active Protection System S7-007 Protection for Sport Baselayer Garments EN1621-1 @ 20 Joules



S7-007 can be used in baselayer garments for sport. Depending on the level of protection required 1 or 2 layers can be used.

Contact us

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