

## Data sheet

## SuperSeal

Made in Germany

### Applications

- Diving suits (dry and semi-dry suits)
- Watersports clothing
- Tents, flexible covers
- Protective clothing for leisure, safety and industrial applications (gas and chemical protection)
- Flexible containers for electronic instruments, documents, machines and apparatus for storage and transport
- Inflatable objects, jumping castles, advertising balloons etc.
- Bags and backpacks for daily use and outdoor activities such as cycling, biking, sailing, hiking, climbing  
...and various others

### Tightness

The TIZIP SuperSeal is pressure tested with 700 mbar air pressure, applied to the front surface including the end stops. The slider engages positively into the docking end. Heavy bending may cause leakage. Please try to avoid!

### Testing

The sealing function of the TIZIP SuperSeal is tested by fastening the zipper in a straight rectangular frame, 3 cm wide, face down. Compressed air is applied to the front side of the zipper and water poured over the back until it is submersed. To pass the test no air bubbles may occur for a period of 20 seconds. Random testing is performed during the production of every batch.

### Storage and Transportation

For storage, long- and short term and during transportation we recommend to leave the zipper chain closed. The closed chain protects the sealing lips and makes them more resistant to bending.

**High humidity and temperatures over room temperature must be avoided!**

Before and after long term storage and prior to using please open the chain completely, relubricate chain tips and docking end seal and operate the slider a few times over the full length.

### The technical principle

The TIZIP SuperSeal is made from a strong, plastic coil zipper on a high strength fabric. Every coil half is safely embedded and secured in a plastic profile. When the TIZIP SuperSeal is closed the sealing lips above and below the coil are compressed making a perfect seal. The entire plastic profile is highly abrasion resistant. The unique design prevents the slider from wearing down the sealing lips when the zipper is opened or closed.

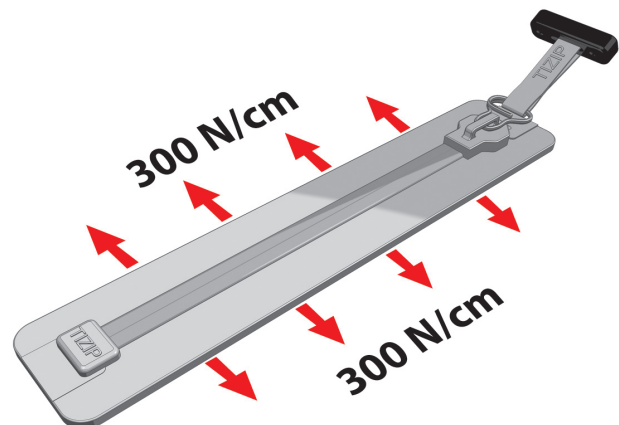
The physical design of the TIZIP SuperSeal increases the seal strength when the pressure is raised or when cross tension is applied. Both actions lead to an increased mechanical pressure on the top sealing lip.

### Dirt or Sand

The TIZIP SuperSeal is highly resistant to damage caused by dirt or sand. However if dirt or sand are present, the zipper should be cleaned with soap and water. Dirt particles can affect the sealing function if they get caught between the chain profiles. If the TIZIP SuperSeal closure is used to protect life or sensitive material, the sealing function and cleanliness of the chain area should be double checked prior to every usage.

### Stability

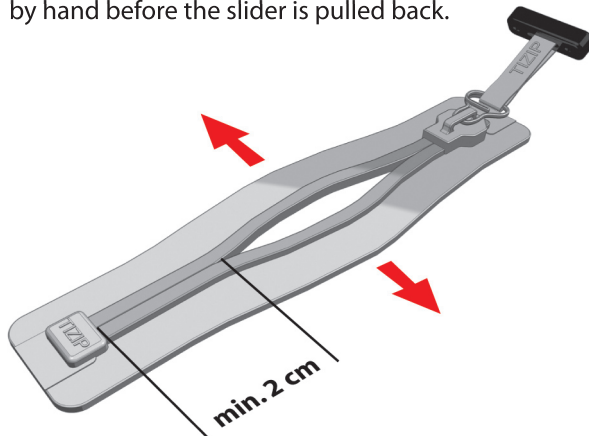
The TIZIP SuperSeal's performance in terms of strength and durability is outstanding. It can take weight, it is abrasion resistant and it will survive short term sharp bending and twisting without separating. When closed, the TIZIP SuperSeal has a crossbreaking strength of minimum 300 N/cm.



## Over-Stressing

However, in the event the TIZIP is overstressed during closing, the chain may stay separated. In this case, simply move the slider back, reduce the cross tension, then reclose the zipper. The TIZIP will not be damaged by this procedure.

If the zipper has opened all the way down into the bottom stop, the first min. 2 cm have to be closed by hand before the slider is pulled back.



## Versions



- Width: 50 mm and 70 mm
- Chain width: 11 mm

Extensions over end stop and docking end:  
16 - or 25 mm

## Resistance

UV-Light	Very Good
Microbes	Satisfactory
Oil and Petrol	Very Good
Hydrolysis (normal temperatures)	Good
Hydrolysis (extreme temperatures and humidity)	Sufficient
Temperature range	-30°C - +80°C
Light acids and alkalis (normal temperature)	Good

## Lubrication

Prior to installation in a product, no lubricant is applied to the TIZIPs. However, lubrication is essential to maintain the ease of operation and proper coupling of the chain. After installation into a product, manufacturers are requested to lubricate the TIZIP all along the chain tips, and to operate the slider the full length of the chain, in both directions, at least 5 times. Acid free, grease or oil lubricants may be used.

**Initial lubrication and operation is essential for the full strength of the seal!**



If the chain is dry, re-lubricating by the user is recommended from time to time (apx. every 10 uses). Please see the instruction card and lubricant tube supplied with each TIZIP. Lubricating the outer flanges of the sealing profile reduces the sliding force greatly.

## Operating Force

For the sealing function the TIZIP SuperSeal requires a fairly strong pull of the slider. Please allow a slightly higher pulling force as compared to regular zippers. The handy toggle allows comfortable operation. A wet surface or lubricant on the outer flanges of the sealing profile reduces the pulling force greatly.



European Union:  
TITEX Vertriebs-GmbH  
Rainstr. 6, DE-91560 Heilsbronn  
TEL: +49 (0)9872 - 800188  
FAX: +49 (0)9872 - 800288  
info@tizip.com www.tizip.com

Outside European Union:  
TITEX Vertriebs-GmbH  
Bahnstraße 58, CH-8105 Regensdorf  
TEL: +41 (0)43 3110252  
FAX: +41 (0)43 3110253  
info@tizip.com