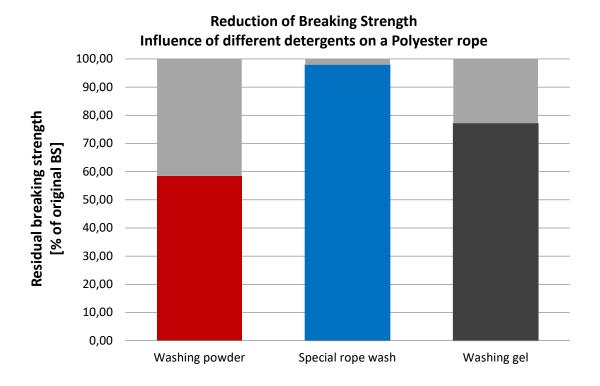
WHAT HAPPENS IF ... my rope gets washed?

One of the main questions in the rope world is "Is my rope still good to work with?" Manufacturers specify a theoretical service life in their instructions for use. This is mainly based on very rare use. The actual service life, especially when the rope is heavily used, depends on a lot of factors that are beyond control of manufacturers. In this series, TEUFELBERGER presents the results of a study made on "Deliberate damage of ropes". In this paper, we want answer some frequent questions on the washing ropes and share the results with you.

1. Polyester rope washed with 3 kinds of detergent

TEUFELBERGER washed a Polyester rope 8 times (washing machine, 30°C, no spinning) with different detergents. After each washing cycle the ropes were left to dry naturally for 24 hours. Then the rope was tested for its residual breaking strength.

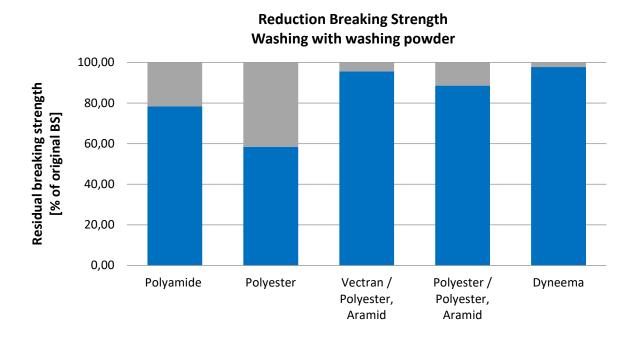
The loss in breaking strength was only 2% when using a special rope detergent which guarantees soft cleaning due to its ingredients (e.g. Scrubba). The loss in breaking strength was highest with washing powder, the rope sample lost 41% of its strength. Washing gel works better than washing powder but still reduced the breaking strength by 22% at a Polyester rope.



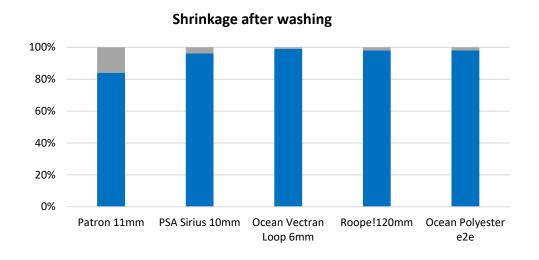
2. Different ropes washed with washing powder

As washing powder harmed the Polyester rope most, TEUFELBERGER tested its influence on the following five ropes made of different materials.

- Patron 11 white-red (Polyamide)
- Sirius Accessory Cord 10mm (Polyester)
- Ocean Vectran Loop 6mm (Vectran / Polyester, Aramid)
- Ocean Polyester e2e 8mm (Polyester / Polyester, Aramid)
- Roope! 60cm (Dyneema®)



The tests also showed that ropes shrink in a different way. While the Polyamid rope shrank 19%, Ropes made of Polyester, Dyneema® or material mixtures with Aramid only shrank by max. 4%.





CONCLUSION & RECOMMENDATIONS

How should I wash my rope?

Our user instructions for safety ropes and all other PPE articles give the following information. Please proceed accordingly when washing your rope.

For cleaning, use lukewarm water (and – if available– a rope detergent in accordance with the cleaning instructions provided thereon). Do not use a textile detergent. Following cleaning, rinse the product with plenty of clear water. In any event, prior to storage or use, allow the product to dry completely in a natural way and not in direct sunlight, or near fires or other heat sources.

Can I wash my rope in the washing machine?

Yes, it is possible to wash your rope in the washing machine. There is no restriction in use of program, but spinning should not be used unless quick drying is necessary. Please make sure to not exceed 30°C water temperature when washing your rope.

Does washing reduce the breaking strength of my rope?

Yes, washing does reduce the strength of your rope. The amount of strength loss depends heavily on the detergent used and on the material the rope is made of, as shown before.

When washing your rope, please follow these instructions:

- Do not wash more often than necessary
- We recommend to use rope detergents
- Temperature must never be higher than 30°C
- Rinse/post-rinse the ropes well, using clean water
- Do not use spinning function in the washing machine
- Dry naturally