

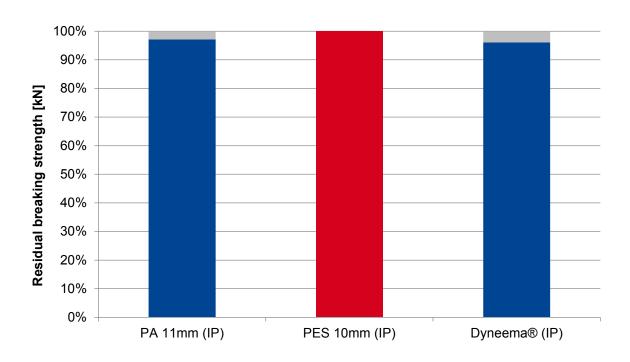
Rope disinfection: Covid-19 (Corona Virus)

The Corona Virus and the Covid-19 disease caused by it are spreading all over the world and bring restrictions in all areas of life. The general recommendations include an avoidance of social contacts by self-quarantine and increased hand hygienic to slow down contagion. TEUFELBERGER supports this measures and asks partners and customers to do the same.

Nevertheless, we got some questions, if a disinfection of ropes might be sensible and possible in these times. As we already did some tests on this in the past, we want to share that information with you. But please keep in mind that disinfectants are scarce at the moment and are more urgently needed in other places than for the disinfection of ropes. #stayhome #staysafe

In 2015, TEUFELBERGER, the global rope manufacturer and parent company of MAXIM climbing ropes and ROBLINE marine ropes, conducted a study about "Deliberate Damage of Ropes". In this study, we tested the impact of different kinds of soiling, washing and abrasion on the rope's breaking strength. In the arborist business, for example, it is a normal course of business to disinfect the equipment after working in pest-infested regions. Therefore, as a part of the study, the impact of disinfection was also tested. In light of the recent developments, we would like to recall these results and share them with you.

In the study we tested ropes made of different materials (Nylon, Polyester, Dyneema®). The ropes were disinfected one time by being submerged in a solution of 70% Isopropanol and 30% distilled water for 3 minutes and then left to air dry naturally for 48 hours before being tested for their residual strength.





The results show, that there has been no decrease in breaking strength for Polyester ropes, and only 2-4% decrease for other ropes tested. However, we did note that the hand and flexibility of the rope does deteriorate after the disinfection.

Based on these results, from TEUFELBERGER's perspective, it is acceptable to disinfect your ropes in this manner

We recommend the following when disinfection ropes:

- Ropes can be disinfected by being submerged in a solution of 70% Isopropanol and 30% Distilled Water for 3 minutes maximum.
- Air dry the ropes naturally away from heat source or direct sunlight
- The Safety rules provided on the safety data sheet should be followed for all other rope care
- Disinfection should be done when needed and not daily the long term impact is being tested. A qualified inspection of the rope is mandatory.

This Data applies to the disinfection of the ropes themselves and does not make any recommendations as to any other procedures or policies for preventing infection in other areas.

Since the impact of Covid-19 is still being studied and further understood, this study represents a point in time test. We are continuing to test and will update this document as new data becomes available.