

## **Disinfection of Ropes**

In light of the current situation regarding the Corvid19 pandemic we recognize that our customers are concerned about how they can ensure their ropes are cleaned and disinfected.

Marlow have always recommended that ropes are washed in pure soap. Based on the current guidance from the WHO we believe this will be effective at combating Corvid19 as soap breaks down the virus's lipid shell rendering it unviable.

To wash a rope, immerse the rope in soapy water and agitate well. The rope may be left to soak allowing the soap solution to fully penetrate the fibres. After washing the rope should be rinsed thoroughly to remove any soap residue. The residue will not harm the rope but may alter the friction properties which could cause unintended consequences in use. After rinsing the rope should be hung up to dry. Elevated temperatures (greater than 40 Deg C) should not be used to dry the rope.

While wet a nylon rope will be weaker than when dry and will have less ability to absorb the energy of a fall.

Nylon ropes will shrink and become firmer after washing, this is normal.

Normal laundry detergents are not recommended due to the presence of additional chemicals such as surfactants and optical brighteners. If nothing else is available, then detergents can be used as these additives are not anticipated to affect the strength of the rope however, they could cause the rope to be more susceptible to moisture and other minor effects.

Marlow Ropes have tested Isopropyl alcohol (IPA) on type 6 Nylon ropes including Static ropes and brief exposure has been shown to have no detectable effect on the performance. Therefore, it is possible to disinfect ropes with a spray of 70% IPA and water solution. This should not be done on a regular basis though as IPA can be absorbed by Nylon fibres and may act as a plasticizer weakening the ropes over prolonged exposure.

Any washing or disinfection of ropes will cause them to be degraded slightly if only by the mechanical action of washing. The process should therefore be done as little as is possible.

Do NOT expose ropes to bleach. This can cause severe damage to rope fibres, in particular the polyester used in many of Marlow's arborist products.

Do NOT expose ropes to oxidizing agents such as hydrogen peroxide. These can severely damage fibres like Nylon without any visible indication of harm.

Do NOT use UV lights to sterilize ropes, the UV will damage fibres, in particular UVC used in industrial sterilization equipment can be expected to do more harm than other types of UV.

Do NOT use elevated temperatures to sterilize a rope. High temperatures can affect fibres, particularly materials like HMPEs.

As always, if there is any reason to think a rope's performance may be in question it is best to retire that rope from service.