

Polar Band® Bands and Tubes

FAQ's

Q. Why are Polar Band® bands narrower than standard latex bands?

A. The width of Polar Band® bands is 100mm. This has been found in practice to be an optimal size for grasping without excessive bunching of the band in the users hands. The 100mm width also helps the bands to stay flat and not crease up during use. Traditional latex bands are wider, typically 135-145mm because they were originally adapted from dental dam material which is traditionally 150mm wide. Because of this they have to be scrunched up in the hand.

Q. Why are the colours of Polar Band® brighter than the bands I have used before?

A. The cheerful bright colour sequence of the Polar Band® bands and tubes was selected after careful market research into which colours appeal best to a wide range of users. These users range from the young and fit to the elderly and infirm. The more traditional dull powdery colours of conventional latex bands were found to be dreary and unexciting for most users. The bright colours and powder free finish of Polar Band® bands are designed to give maximum attraction and greater user compliance. The Polar Band® colours follow the lightest to darkest – weakest to strongest regime that is common for exercise bands and tubes.

Q. Why are Polar Band® bands better than conventional latex bands?

A. Latex bands and tubes are made from natural rubber latex which is a material that can be quite variable in its physical properties. Then the process involved in converting natural latex into solid rubber to make the bands and tubes is not easily controllable. This often results in bands and tubes that have significantly different resistance levels from one batch to the next. The same coloured band from one batch can be up to 20% more or less in resistance than the same colour bands from a batch bought at different time! Often the resistance level of a band of one colour can overlap the resistances of the bands of the colour level higher or lower than the specific band being used. The manufacturers of latex bands do not tell you this. They publish the resistance levels for each colour bands but this is an average number and they do not tell you the tolerance ranges as these can be very wide. Put simply latex bands are inconsistent in performance.

Polar Band® bands and tubes on the other hand are made from synthetic polymers that are produced to very tight physical property specifications. There is little or no variability in the properties of the raw materials. Then the bands and the tubes are made using a precision engineering manufacturing process. All Polar Band® bands and tubes are made to very tight specifications in an ISO 9000 QA environment, FDA registered manufacturing facility in Europe. It is the modulus of band or tube, i.e. the force required to stretch the band to a given amount of elongation, which is the controlling factor, not the thickness or diameter as with latex bands. This means that every Polar Band® band or tube is certain to deliver exactly the same resistance force without any overlap to another colour level. Polar Band® bands and tubes are highly consistent in performance.

Q. Will Polar Band® bands last as long as latex bands?

A. Samples from every batch of Polar Band® bands and tubes are tested on a dynamic cyclic durability device. In this test the bands are stretched repeatedly to 300% elongation; this is twice the elongation amount used in most exercise programmes. In this arduous test Polar Band® bands and tubes are expected to withstand a minimum of 10,000 stretches; usually they last for 25-30,000 stretches which is many times longer than the normal life usage in practice. Latex bands on the other hand are much more variable and often break anywhere between 3,000 -20,000 stretches. In other words, Polar Band® bands are highly consistent if used within normal operating parameters whereas latex bands are inconsistent and unpredictable.

Q. How far can I stretch Polar Band® bands?

A. Polar Band® bands and tubes are designed to be used within the elongation range of 25-250% stretch. Most commonly the operating range for general exercise will be 25-200%. Within this range the stress-strain properties of the bands and tubes are generally linear and highly consistent from one level to another.

Q. Why do I need to “condition” the bands with a pre-stretch?

A. Just as when you blow-up a new balloon for the first time it is harder blow it than on subsequent attempts elastic bands have to be pre-stretched too. This is because the molecular structure of elastic polymer materials needs to be oriented before reaching a stable state. This pre-stretching applies to all exercise bands whether they are latex or Polar Band®. To “condition” the band or tube you should pre-stretch it by giving it one long hard pull to approximately 250% elongation and hold it there for approximately 5 seconds before using it for regular exercise. Although the Polar Band® bands will stretch to nearly 600% elongation it is not recommended under normal circumstances to stretch them by more than 250% elongation

Q. What is the difference between a “universal” band and the latex bands that I have been using?

A. In a nutshell, a universal band like Polar Band® will do everything that latex bands can do without having any of the disadvantages of being made from natural rubber latex. With a universal band you do not need to have two types of band in your clinic or gym, i.e. one for regular use and the other for users that may have allergies to natural rubber or latex. Some estimates indicate that up to 10% of the population may be susceptible to latex allergy, rising to 25% for hospital workers and up to 75% for children with spina bifida. You never know who may have a latex allergy, so why take the risk when Polar Band® bands and tubes will do everything the latex bands do and yet are latex free.

TECHNOLOGY HIGHLIGHTS

Designed for professional therapy settings and proficient fitness training Polar Band® Progressive Resistance Exercise Bands and tubes are the most advanced system of progressive resistance exercise products available. Made with a proprietary elastomeric compound Polar Band® bands and tubes are 100% latex-free and yet they perform with the same desirable stretch properties as latex that is preferred by most therapists and trainers. The specially formulated co-polymer material that is used to make Polar Band® bands has been engineered to deliver dynamic performance characteristics that cannot be achieved with natural rubber (latex) and other compounds. These clinical advantages include superior consistency of tension and very evenly spaced resistance levels between each band level for more clinically sound Progressive Resistance Exercise (PRE's). Odour and powder free, Polar Band® bands are preferred by trainers, therapists and their pupils and patients over traditional latex or non-latex bands.