What is the difference between natural rubber with synthetic rubber?

Rubber divided into natural rubber and synthetic rubber. Natural rubber is extracted from rubber trees, rubber grass and other plants and going through processing of gelatine; Synthetic rubbers are made of various monomers after the polymerization.

Physical properties of natural rubber: Natural rubber at room temperature has high elasticity, plasticity, and very good mechanical strength, slightly hysteresis loss is small, heat production is low at multiple deformations. So the flexing resistance is also very good, and because it is not polarity rubber, its electric insulation performance is good.

Chemical properties of natural rubber: Because of the unsaturated double bond, natural rubber has strong ability chemical reaction. Light, heat, ozone, radiation and flexible deformation and copper, manganese and other metal can promote the aging of rubber, not resistant to aging is the weakness of natural rubber. However, by adding the stabilizer to natural rubber, sometimes natural rubber sheeting can keep for a long time.

Medium resistance properties of natural rubber: Natural rubber sheets have good alkali resistance performance, but not resistant to strong acid. Natural rubber sheets can only solve a few polarity solvent, while hydrocarbon, halogenated hydrocarbon, carbon disulfide, ether, senior ketone and senior fatty acid are dissolved to natural rubbers.

Synthetic rubber sheets have a few varieties which are similar to the performance of natural rubber, but most of them are different to natural rubbers. But both of them are high elastic polymer material, generally require curing and processing, then to be practical and get using value.

Synthetic rubber is generally speaking not that full-scare than natural rubber on the performance, but it has high elastic, insulation, air tightness, oil resistant, resistant to high or low temperature, thus is widely used in industry and agriculture, national defense, transportation and daily life.