



- Precipitated Silica from Rice Husk Ash Brisil, India
- Liquid Polybutadiene EVONIK, Germany
- Plasticizers from Renewable Sources Matrica, Italy
- Sustainable Talc Magris, USA
- Cationic/Alkaline Activator for Sulfur Vulcanization Oxitec, Brasil
- Renewable Functional Fillers (RFF) UPM, Finland
- Bio-Attributed Synthetic Polymers Versalis, Italy

# Precipitated Silica from Rice Husk Ash – Brisil, India

BSIL - a "green" Silica as a sustainable filler for rubber. A significant lower  $CO_2$  footprint makes the product ideal as a direct replacement for conventional Silica and other active fillers. The range includes various types from traditional grades to highly dispersible Silica. Based on its own, patented technology, Brisil manufactures this product already for several years. Current annual capacity is approx. 7.5Kt.

#### Liquid Polybutadiene – EVONIK, Germany

Polyvest<sup>®</sup> – a range of functionalized and nonfunctionalized liquid polybutadienes. Versatile in use as cross-linkable plasticizer, co-agent in peroxide vulcanization, coupling agent with Silica or processing additive. Polyvest<sup>®</sup> eCO offers the opportunity to get all types from ISCC Plus certified sustainable production (mass balance approach).

# Plasticizers from Renewable Sources – Matrica, Italy

Matrilox synthetic plasticizers based on vegetable oil. Matrilox plasticizers are sustainable alternatives to TDAE-Oil and ester plasticizers in diene elastomers such as SBR or NBR. Matrilox plasticizers offer an easy dropin solution in rubber formulations with no significant interaction on vulcanization characteristic.

# Sustainable Talc – Magris, USA

UL Environment validated and certified talc products of the brands JetFil<sup>®</sup>, Mistron<sup>®</sup> and Silverline<sup>®</sup>. These new sustainable grades are 100% from pre-consumer (post-industrial) recycled feedstocks, converted into high purity talc. Magris talcs are highly functional filler materials, providing various advantages such as improved processing or barrier properties.

#### Cationic/Alkaline Activator for Sulfur Vulcanization – Oxitec, Brasil

Oxirubber – a novel and environmentally friendly alternative to zinc oxide as activator in Sulfur vulcanization. Oxirubber is a fully sustainable product, as it's based on a bye-product of pulp production. Furthermore, unlike zinc oxide, Oxirubber is not classified as dangerous goods. Start of commercial production is in full swing.

# Renewable Functional Fillers (RFF) - UPM, Finland

RFF - a wood-based, pioneering new generation of sustainable fillers for rubber and plastics. A negative carbon footprint, biodegradability and zero PAHs are just some of the remarkable features of this unique product. Soon to be manufactured in the world's first of its kind biorefinery in Leuna, Germany, RFF is truly a sustainable solution for rubber and plastics.

# **Bio-Attributed Synthetic Polymers – Versalis, Italy**

Europrene<sup>®</sup> and Dutral<sup>®</sup> synthetic polymers from bionaphtha and chemical recycling. Versalis has obtained a ISCC Plus certification for production of synthetic polymers (mass balance approach). All certified polymers do not differ in their chemical composition and physicalmechanical performance from those made from fossilbased raw materials.



# Talk to your experts.

Take advantage of our excellence in every detail for your products: Your LuV experts will be happy to advise you.

Lehmann&Voss&Co. KG Alsterufer 19 · 20354 Hamburg · Germany Tel.: +49 40 44197-0 Email: luvomaxx@lehvoss.de www.luvomaxx.com