

SYNTHETIC POLYISOPRENE LATEX FOR ENHANCED PROCESSING AND SKIN FRIENDLY LATEX PRODUCTS

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For over 10 years Kraton has supplied Cariflex™ Polyisoprene latex, a synthetic latex that can consistently run on standard dipping lines, and produces goods characterized by a mix of strength and comfort, while not containing natural-rubber-related proteins suspected to trigger Type I allergies. The market is now looking forward to the next generation of improvements - safer, nicer, and more efficient solutions. Recurrent customer requests include options to reduce risks associated to Type IV allergies that are not related to the elastomeric raw material but rather to the compounding chemicals. On the manufacturing front, customers always look for improved productivity. We have investigated these topics and offer avenues to tackle them.

Key words: Synthetic polyisoprene, Type I allergy, Type IV allergy

INTRODUCTION

Pure, strong and soft are the key features in Cariflex™ Polyisoprene latex (Cariflex™ IR0401 latex) which offers customers an alternative to natural rubber latex (NRL) in dipped goods applications. A key feature of Cariflex™ polyisoprene latex is that it is not made with natural rubber, and hence does not contain the natural rubber-related proteins suspected to trigger Type I allergic reactions.

Since its commercialization in 2001, Kraton's Cariflex™ IR0401 latex has been used successfully for dipped goods such as surgical gloves and condoms. Such applications require a combination of

protection and comfort features, which the most demanding users can find in articles made of Cariflex™ IR0401 latex.

The Type I allergy being resolved, recurrent customer requests now include options to reduce risks associated to Type IV allergies, which are not related to the presence of proteins in the elastomeric raw material but rather to the vulcanization chemicals.

On the manufacturing front, customers always look for improved productivity or more forgiving processes, such as easier compounding, compound predictability, curing at lower temperature or for shorter duration, improved compound stability or achieving a longer compound pot-life. In a