



Liveo™ TI-3021 Silicone Elastomer Blend

Silicone Topical Ingredients

Liveo™ TI-3021 Silicone Elastomer Blend is a mixture of high molecular weight cross linked silicone (14%) in dimethicone 5 cSt.

COMPOSITION

Silicone elastomer blended with a low viscosity (5 cSt) dimethicone

INCI name: Dimethicone and Dimethicone Crosspolymer

Applications, Features & Benefits:

Liveo™ TI-3021 Silicone Elastomer Blend is commonly used in topical formulation due to its silky, smooth non-tacky feel, and long lasting feel on the skin. This silicone elastomer blend is used in a wide range of dermatological consumer, healthcare, medicated skin care and topical medical devices applications.

PACKAGING

This product is available in 15 kg pails and 180 kg drums. Samples are available in 0.4 kg cans.

Product information

Colour

Clear

Rheological properties

Viscosity

370 mPa.s

Additional Information

How to use

Liveo™ TI-3021 Silicone Elastomer Blend can be formulated into oil-in-water emulsions, water-in-silicone emulsions, and anhydrous products. To incorporate Liveo™ TI-3021 Silicone Elastomer Blend into a formulation, it should be combined with the oil or silicone phase. Make certain Liveo™ TI-3021 Silicone Elastomer Blend is uniformly dispersed in the oil/silicone phase before proceeding. The viscosity of Liveo™ TI-3021 Silicone Elastomer Blend decreases as it is diluted with other oils.

Liveo™ TI-3021 Silicone Elastomer Blend is a viscous product but has the unique characteristic of being a shear thinning material. The following information will aid in the selection of the proper equipment to use when processing Liveo™ TI-3021 Silicone Elastomer Blend.

Pump recommendation :

GRACO® Bulldog 10:1 Pump with follower plate. For more information, contact GRACO at +1 800 367 4023.

Note: GRACO offers various Bulldog models, and other pump manufacturers may offer similar equipment equally capable of processing the material efficiently. Users should work directly with the pump manufacturer to determine the best design for their needs.



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Customer-specific pump design considerations:

1. Pressure and flow requirements :

- a) Air supply pressure: will depend on plant's air supply capabilities.
- b) Discharge pressure: will depend on total pressure required to move the silicone elastomer blend from point A to point B. If pressure drops due to elevation, frictional losses within the piping, fittings, valves, filters, etc., will need to be considered.
- c) Flow requirements: will depend on how quickly the user wishes to transfer the silicone elastomer blend from a 208 liter drum into a vessel.

2. Material viscosity at the application temperature :

Liveo™ TI-3021 Silicone Elastomer Blend is shear thinning. Effective viscosity is 80 to 100 Pa.s. This is only an example; it is the responsibility of the user to determine the effective viscosity based on the user's application. Once the material is pushed through the pump by the follower plate and processed in the pump, the product will shear thin and process as a lower-viscosity fluid.

3. Construction material for wetted parts :

Stainless steel is recommended but carbon steel may also be used.

4. Construction materials for seals and gaskets.

VITON® or TEFLON® materials are recommended. Please contact DuPont for a alternative.

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