

# ITACONIX® DSP 2K™

## **Product Description**

Itaconix® DSP 2K™ is a low molecular weight linear polyitaconic acid partially neutralized with sodium salt. It demonstrates excellent binding capacity with metal ions, particularly polycationic ions, and especially with calcium. Made from sustainable bio-based feedstock, it is readily biodegradable and has very low toxicity for a preferable environmental profile.

#### **Performance**

Very high binding capacity with calcium (0.86 g of CaCl2/g of DSP 2K at pH=10.7, 25°C). Significantly higher binding capacity than polyacrylates, polyaspartate, EDTA salts and STPP. Product has good hydrolytic, chlorine and thermal stability.

## **Applications**

Chelant, builder, stabilizer, dispersant, anti-redeposition agent, and sequestrant for use in:

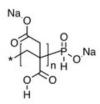
- Industrial, institutional and household Cleaners
- Laundry detergents and stain treatments
- Vehicle wash products
- · Automatic dish detergents
- Other aqueous applications above pH 7

For more information contact your representative or:

## **Itaconix Corporation**

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## **Structural Formula/Composition**



- CAS# 26099-89-8
- Common Name: sodium polyitaconate
- INCI Name sodium polyitaconate
- Others: water (aqua), itaconic acid

## **Typical Physical/Chemical Properties**

- · Granular free flowing solid
- · Off white color
- No odor
- pH: 5.2 at 10% in water
- Bulk density: 0.7 g/cm<sup>3</sup>
- Specific gravity: 1.3 g/cm<sup>3</sup>
- 83 wt. % solid hydrate
- G grade 550 micron avg. particle size
- Q grade less than 180 micron max. particle size
- Number average molecular weight: 2800g/mole
- Weight average molecular weight: 5600g/mole
- Dispersity: ~2.0
- Residual itaconic acid: <5%</p>

## Health/Safety/Environmental

- Acute Oral Toxicity (rat): LD50>2000mg/kg
- Chronic Skin Sensitization (rat): NOEL
- Acute Ocular Sensitization: NOEL
- Readily Biodegradable: OECD 301A

**NOTE:** Before using this product, please read and familiarize yourself with the product MSDS.

The information in this bulletin is believed to be accurate, but all recommendations are made without warranty since the conditions of use are beyond our control. The listed properties are illustrative only, are not product specifications, and are subject to change without notice. Application-specific testing to ensure technical, health/safety, regulatory and environmental suitability is the responsibility of the application developer. Itaconix disclaims any liability in connection with the use of the information, and does not warrant against patent infringement by reason of the use of its products in combination with other materials or in any process.