

## 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 CaCl<sub>2</sub>/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:

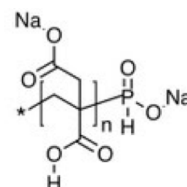
- Industrial, institutional and household Cleaners
- Laundry detergents and stain treatments
- Vehicle wash products
- Automatic dish detergents
- Other aqueous applications above pH 7

*For more information contact your representative  
or:*

#### **Itaconix Corporation**

2 Marin Way  
Stratham NH 03885 USA  
TEL: 603.775.4400  
info@itaconix.com  
www.itaconix.com

### 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%

### 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.