

Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalarempriakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet, Bangkok, Thailand 10250

Factory - 188/3, Moo 8, Tambon Bangpu Mai, Amphoe Muang Samut Prakan, Samutprakan, Thailand 10280

Mobile - Thai : 0804531391, English: 0839415475, E-mail – contact@polymeradd.co.th



TECHNICAL DATA SHEET

ZNBZ-553

PRODUCT CLASSIFICATION

Chemical Name	ZINC BENZOATE (MICRONIZED)
Grade Name	ZNBZ-553
CAS No.	553-72-0
HS Code	2916.31.90
EINECS No.	209-045-9
Molecular Formula	$C_{14}H_{10}O_4Zn$
Molecular Weight	307.61 g/mol
Synonyms	Zinc dibenzoate; Benzoic acid, zinc salt

PHYSICAL & CHEMICAL PROPERTIES

Property	Typical Value / Description	Test Method
Appearance	White to off-white fine powder	Visual
Odor	Faint aromatic	Sensory
Assay (as $Zn(C_6H_5COO)_2$)	$\geq 99.0\%$	Titration
Zinc Content	21.0 – 22.5%	Complexometric
Moisture Content	$\leq 1.0\%$	Oven Drying (105 °C)
pH (1% dispersion)	6.0 – 7.5	pH Meter
Melting Point	$> 280\text{ }^{\circ}\text{C}$ (decomposes)	Capillary
Solubility in Water	Slightly soluble	Literature / Observation
Solubility in Organic Solvents	Soluble in alcohols	Observation
Bulk Density	0.30 – 0.50 g/cm ³	Tapped Density
Particle Size (D50)	8 – 12 μm	Laser Diffraction
Particle Size (D90)	$\leq 25\text{ }\mu\text{m}$	Laser Diffraction

➤ The commercial product specification may include only a selection of the properties listed above; this additional data is provided for general technical reference.

HEAVY METALS (EU REGULATION 10/2011 – CONTENT LIMITS IN ADDITIVES)

Element	Typical Limit	Test Method
Lead (Pb)	$\leq 5\text{ ppm}$	ICP, AAS, XRF
Cadmium (Cd)	$\leq 1\text{ ppm}$	ICP, AAS
Mercury (Hg)	$\leq 1\text{ ppm}$	ICP, CV-AAS
Arsenic (As)	$\leq 1\text{ ppm}$	ICP, AAS

Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalarempriakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet, Bangkok, Thailand 10250

Factory - 188/3, Moo 8, Tambon Bangpu Mai, Amphoe Muang Samut Prakan, Samutprakan, Thailand 10280

Mobile - Thai : 0804531391, English: 0839415475, E-mail – contact@polymeradd.co.th



USES / APPLICATION

Industry	Commercial Application / Uses (Micronized Grade)
Plastics / Polymers	Nucleating agent in PP, PE; acid scavenger; crystallization enhancer
Masterbatches	Dispersion aid and thermal modifier
Adhesives	Heat stabilizer in PSA and HM adhesives
Coatings	Functional additive in specialty and heat-resistant coatings
Inks & Pigments	Filler and stabilizer for high-temperature pigment dispersions

US FDA 21 CFR LISTING

CFR Section	Title / Description
175.300	Resinous and polymeric coatings – permitted as additive
178.2010	Stabilizers and lubricants for polymers

COLOUR IMPACTING IMPURITIES

Element	Typical Max Limit (ppm)	Test Method
Iron (Fe)	≤ 100 ppm	ICP, AAS, XRF
Manganese	≤ 30 ppm	ICP, AAS, XRF
Copper (Cu)	≤ 20 ppm	ICP, AAS, XRF
Nickel (Ni)	≤ 10 ppm	ICP, AAS, XRF
Chromium	≤ 10 ppm	ICP, AAS, XRF

PRODUCT PERFORMANCE IMPACTING IONS / IMPURITIES

Ion / Element	Typical Max Limit (ppm)	Test Method
Sodium (Na)	≤ 100 ppm	ICP, AAS, XRF
Potassium (K)	≤ 100 ppm	ICP, AAS, XRF
Calcium (Ca)	≤ 300 ppm	ICP, AAS, XRF
Magnesium (Mg)	≤ 200 ppm	ICP, AAS, XRF
Chloride (Cl ⁻)	≤ 100 ppm	Ion Chromatography
Sulfate (SO ₄ ²⁻)	≤ 100 ppm	Ion Chromatography

Disclaimer:

Zinc Benzoate is intended for industrial use only. It is not suitable for pharmaceutical, cosmetic, or medical implant use. For food-contact applications, regional regulations must be verified. Typical values are not specifications unless confirmed in writing.

Month of Creation: July 2025

Month of Review: July 2027