

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 LIBZ (MICRONIZED)

PRODUCT CLASSIFICATION

Item	Description
Chemical Name	Lithium Benzoate
Grade Name	LIBZ (Micronized)
CAS No.	553-54-8
HS Code	2916.31.90
EINECS No.	209-046-1
Molecular Formula	$C_7H_5LiO_2$
Molecular Weight	~128.05 g/mol
Synonyms	Benzoic acid lithium salt

PHYSICAL & CHEMICAL PROPERTIES

Property	Typical Value / Description	Test Method
Appearance	White to off-white micronized powder	Visual
Odor	Odorless	Sensory
Purity	≥ 98.5% (on dry basis)	Titration / HPLC
pH (1% solution)	7.0 – 9.0	pH meter
Loss on Drying	≤ 1.0%	Oven drying at 105 °C
Melting Point	~288 – 300 °C (with decomposition)	Literature / DSC
Solubility in Water	Soluble (approx. 80 g/L at 25 °C)	Literature
Solubility in Alcohol	Slightly soluble	Observation
Bulk Density	0.40 – 0.60 g/cm ³	Tapped Density
Particle Size (D50)	3 – 5 µm	Laser Diffraction
Particle Size (D90)	< 20 µm	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)	≤ 2 ppm	ICP, AAS, XRF
Cadmium (Cd)	≤ 1 ppm	ICP, AAS
Mercury (Hg)	≤ 1 ppm	ICP, CV-AAS
Arsenic (As)	≤ 1 ppm	ICP, AAS

USES / APPLICATION

Industry	Commercial Application / Uses
Polyolefins & Engineering Plastics	High-efficiency nucleating agent for PP, HDPE, PBT, and PET
PVC & Rubber	Thermal stabilizer synergist and acid scavenger
Masterbatch & Compounds	Used in optical clarification systems

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Specialty Polymers	Promotes crystallinity and transparency in technical resins
Coatings / Adhesives	Modifier in solvent-based systems (non-aqueous)

US FDA 21 CFR LISTING

CFR Section	Title / Description
Not listed	Not currently approved under direct US FDA listings. For non-food contact industrial use.

COLOUR IMPACTING IMPURITIES

Element	Typical Max Limit (ppm)	Test Method
Iron (Fe)	≤ 50 ppm	ICP, AAS, XRF
Manganese (Mn)	≤ 10 ppm	ICP, AAS, XRF
Copper (Cu)	≤ 10 ppm	ICP, AAS, XRF
Nickel (Ni)	≤ 5 ppm	ICP, AAS, XRF
Chromium (Cr)	≤ 5 ppm	ICP, AAS, XRF

PRODUCT PERFORMANCE IMPACTING IONS / IMPURITIES

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

Disclaimer:

This product is intended for industrial use in polymer, coating, or specialty chemical applications. It is not recommended for pharmaceutical or direct food use unless separately certified. Compliance with food-contact and regional regulatory approvals must be verified by the user. Values above are typical for general reference and not binding specifications unless explicitly confirmed in writing.

Month of Creation: July 2025

Month of Review: July 2027