## Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalaremprakiat, 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 NABZ

### **PRODUCT CLASSIFICATION**

Item	Description
Chemical Name	Sodium Benzoate
Grade Name	NABZ Micronised
CAS No.	532-32-1
HS Code	2916.31.11.70
EINECS No.	208-534-8
Molecular Formula	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>
Molecular Weight	~144.11 g/mol
Synonyms	Benzoic acid sodium salt, E211

### **PHYSICAL & CHEMICAL PROPERTIES**

Property	Typical Value / Description	Test Method
Appearance	White crystalline or micronized	Visual
	powder	
Odor	Odorless	Sensory
Purity	≥ 99.0% (on dry basis)	Titration / HPLC
pH (1% solution)	7.0 – 8.5	pH meter
Loss on Drying	≤ 2.0%	Oven drying at 105 °C
Melting Point / Decomposition	~300 °C (decomposes)	Literature
Solubility in Water	Soluble (63 g/100 mL at 25 °C)	Literature
Solubility in Alcohol	Slightly soluble	Observation
Bulk Density	0.40 – 0.60 g/cm <sup>3</sup>	Tapped Density
Particle Size (Micronized D50)	3 – 5 µm	Laser Diffraction

<sup>➤</sup> 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	
Plastics & Polymers	Acid scavenger, nucleating agent for polyolefins	
PVC & Rubber	Heat stabilizer synergist, dehydrochlorination control	

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Coatings & Adhesives	Moisture scavenger, pH buffer, preservative
VCI Films / Masterbatches	Active ingredient in anti-corrosion formulations
Food Packaging (indirect)	Functional additive in non-contact polymer systems

#### **US FDA 21 CFR LISTING**

CFR Section	Title / Description
182.3733	GRAS – Preservative
175.105	Adhesives – food contact permitted
178.3297	Clarifying agents and stabilizers for polymers

#### **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
Potassium (K)	≤ 100 ppm	ICP, AAS
Calcium (Ca)	≤ 200 ppm	ICP, AAS
Chloride (Cl <sup>-</sup> )	≤ 100 ppm	Ion Chromatography
Sulfate (SO <sub>4</sub> <sup>2-</sup> )	≤ 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