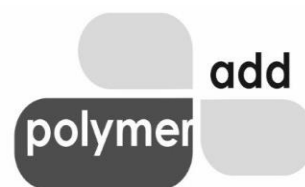


Polymer Add (Thailand) Co.,Ltd.

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 CC-100

Chemical Name	CALCIUM CARBONATE
Grade Name	BS-144
CAS No.	471-34-1
HS Code	28365000
EINECS No.	207-439-9
Molecular Formula	CaCO ₃
Molecular Weight	100.09 g/mol
Synonyms	Carbonic Acid Calcium Salt E170 Ground Calcium Carbonate (GCC) Precipitated Calcium Carbonate (PCC)

TEST	SPECIFICATION	METHOD
Appearance	Fine white powder	Visual
Purity (on dry basis), %	≥ 98.0%	Titration
Melting Range (°C)	> 825 °C (decomposes)	Thermogravimetry
Volatiles (Moisture), %	≤ 0.5%	Thermogravimetry
Water Solubility, %	< 0.01%	Visual / Gravimetric
pH (10% suspension)	8.0 – 9.5	ISO 787-9
Oil Absorption, g/100g	18–25	ISO 787-5
D50 Particle Size (µm)	2 – 5 (adjustable)	Laser Diffraction (Wet method)
D90 Particle Size (µm)	< 10	Laser Diffraction (Wet method)
Whiteness (Hunter L)	≥ 95	Spectrophotometer (CIE)

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

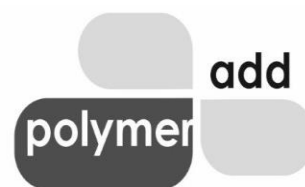
Heavy Metals (EU Regulation 10/2011 (content limits in additives) Plastics (Food-Grade / Repeated Use)		
Element	Limit (Typical or Required)	Test Method
Lead (Pb)	≤ 10 ppm	ICP, AAS, XRF, UV-Vis
Mercury (Hg)	≤ 1 ppm	ICP, AAS, CV-AAS
Cadmium (Cd)	≤ 1 ppm	ICP, AAS
Arsenic (As)	≤ 1–3 ppm (typical)	ICP, AAS
Chromium (VI)	ND / ≤ 0.1 ppm	UV-Vis (after extraction)
Chromium (III)	Report only (non-regulated)	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



Colour impacting impurities		
Element	Target Range / Threshold	Test Method
Iron (Fe)	≤ 200 ppm (for high whiteness)	ICP, AAS, XRF, UV-Vis
Manganese (Mn)	≤ 50 ppm	ICP, AAS, XRF
Chromium (Cr total)	≤ 50 ppm	ICP, AAS
Copper (Cu)	≤ 30 ppm	ICP, AAS
Nickel (Ni)	≤ 30 ppm	ICP, AAS
Cobalt (Co)	≤ 10 ppm	ICP, AAS
Vanadium (V)	≤ 10 ppm	ICP, AAS

Product performance impacting impurities		
Ion/Element	Typical Limit	Test Method
Chloride (Cl ⁻)	≤ 0.1%	ICP, AAS, Ion Chromatography
Sodium (Na)	≤ 200 ppm	ICP, AAS
Potassium (K)	≤ 100 ppm	ICP, AAS

USES / APPLICATION

Industry	Commercial Application / Uses (Micronized Grade)
Plastics	High-performance filler in masterbatches, films, injection-molded PP/PE/PVC for enhanced surface finish, opacity, and rigidity
Rubber	Used in soft rubber products (e.g., footwear soles, gaskets) for improved tensile strength, smoothness, and dispersion
Paints & Coatings	Extender pigment in architectural and industrial coatings for high brightness, controlled gloss, and improved rheology
Paper (Coating Grade)	Used as a topcoat pigment for high-quality printing and ink absorption, improves brightness and print sharpness
Adhesives & Sealants	Rheology control and anti-sag agent in high-viscosity adhesive systems (PU, epoxy); improves mechanical stability
Inks	Pigment extender and anti-settling agent in gravure and offset inks for smooth printability and colour stability

US FDA 21 CFR LISTING

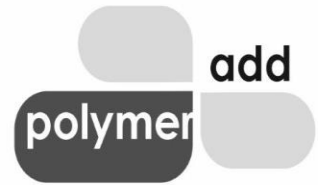
CFR Section	Title / Description
184.1191	Direct Food Substance Affirmed as GRAS
73.70	Colour Additive
175.300	Resinous and Polymeric Coatings
177.1200	Cellophane
177.2600	Rubber Articles
178.3297	Colorants for Polymers

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



Disclaimer:

This product is manufactured according to industrial mineral standards. Although impurity levels comply with general safety limits for use in plastics and coatings, buyers must request specific certification if intended for food-contact or pharmaceutical applications. Not intended for medical implants or long-term contact with mucosa.

Month of Creation: June 2025

Month of Review: June 2027

POLYMERADD THAILAND