

Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalaremprikat, 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 CHLORO-DBS

PRODUCT CLASSIFICATION

Item	Description
Chemical Name	1,3:2,4-Di(p-chlorobenzylidene)-D-sorbitol
Grade Name	CHLORO-DBS
CAS No.	54686-94-1
HS Code	2940.00.90
EINECS No.	258-408-2
Molecular Formula	$C_{20}H_{22}Cl_2O_6$
Molecular Weight	~429.29 g/mol
Synonyms	DCBS, Di(p-chlorobenzylidene)sorbitol

PHYSICAL & CHEMICAL PROPERTIES

Property	Typical Value / Description	Test Method
Appearance	White to light yellow fine powder	Visual
Odor	Odorless to slight aromatic	Sensory
Purity	≥ 98.0%	HPLC
Melting Point (Softening Range)	~245 – 260 °C	DSC / Capillary
Solubility in Water	Insoluble	Literature
Solubility in Organic Solvents	Slightly soluble in hot polar organics	Observation
Bulk Density	0.25 – 0.45 g/cm ³	Tapped Density
Particle Size (D50)	5 – 9 µm (micronized)	Laser Diffraction
Particle Size (D90)	< 18 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
Polypropylene & Polyethylene	Clarifying agent for injection molding, blow molding, and film applications

Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalaremprikat, 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



Thermoplastics	Enhances transparency and reduces haze in semi-crystalline polymers
Masterbatch & Compounds	Incorporated in clarifying and nucleating masterbatches
Food Packaging (EU compliant)*	Used in rigid and semi-rigid food containers and films
Consumer Goods	Microwaveable containers, thin-wall packaging, cosmetics packaging

US FDA 21 CFR LISTING

CFR Section	Title / Description
Not explicitly listed	Not listed under FDA 21 CFR – intended for non-FDA regulated plastics or where migration testing confirms compliance

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 ⁻)	≤ 50 ppm	Ion Chromatography
Sulfate (SO ₄ ²⁻)	≤ 50 ppm	Ion Chromatography

Disclaimer:

This product is intended for industrial and polymer processing applications only. Compliance with regional food contact regulations (such as EU 10/2011) must be verified by the user through migration testing. Typical values listed above are for general reference and not guaranteed specifications unless confirmed in writing.

Month of Creation: July 2025

Month of Review: July 2027