

TECHNICAL DATA SHEET (TDS)

DICYCLOHEXYLAMMONIUM BENZOATE (MICRONIZED)

1. Product Identification

- Chemical Name:** Dicyclohexylammonium Benzoate
- Synonyms:** DCHA Benzoate
- CAS No.:** 31106-44-6
- Molecular Formula:** C₁₉H₂₉NO₂
- Product Form:** Micronized solid powder

2. Product Description

Dicyclohexylammonium Benzoate is a specialty organic ammonium salt supplied in micronized form for formulation-grade applications.

It is primarily used as a co-stabiliser and acid-scavenging component in lead-free PVC stabiliser systems, where uniform dispersion and predictable thermal behaviour are required at low dosage levels.

3. Typical Physical Properties

Property	Typical Value
Appearance	White to off-white powder
Odour	Mild
Softening range	145 – 155 °C
Bulk density	0.40 – 0.60 g/cm ³
Solubility in water	Practically insoluble
Thermal behaviour	Softens / activates in PVC processing window

Values are typical and not intended as specifications.

4. Particle Size Characteristics (Micronized Grade)

Parameter	Typical Range
D50	5 – 10 µm
D90	< 20 µm
D100	< 40 µm

Micronization supports homogeneous dispersion, blend stability, and consistent functional response in stabiliser preblends.

Polymer Add (Thailand) Co.,Ltd.

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



5. Primary Application – PVC Stabiliser Formulations

Used as a **formulation-level co-stabiliser** in:

- Ca/Zn stabiliser systems
- Lead-free PVC stabilisers

Supports:

- Acid scavenging efficiency
- Thermal stability balance
- Stable colour performance during processing

Typically incorporated into:

- Stabiliser powder blends
- Stabiliser granules / pellets

Typical use level (guideline)

~0.05 – 0.30 phr (formulation dependent)

6. Other End-Use Applications (Secondary / Niche)

- **Rubber & elastomer compounds** – formulation-level acid control
- **Specialty coatings & inks** – stability and neutralisation functions
- **Flame-retardant compounds** – auxiliary processing stability support

These applications are formulation-specific and evaluated on a case-by-case basis.

7. Processing & Handling

- Supplied as a **free-flowing micronized powder**
- Suitable for **dry blending and pre-formulation**
- Compatible with standard stabiliser blending equipment

8. Storage & Shelf Life

- Store in a **cool, dry, well-ventilated area**
- Keep container tightly closed
- **Shelf life:** 24 months under recommended storage conditions

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9. Packaging

- 20–25 kg bags
- Other packaging available on request

10. Regulatory & Compliance (Indicative)

- Not classified as SVHC under REACH
- Intended for **industrial use only**
- Detailed regulatory status available upon request

11. Disclaimer

The information provided is based on typical data and experience and is intended for guidance in formulation development. Users should conduct their own evaluations to determine suitability for their specific applications.

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