



CARBOTAL DGE 40

Technical Data Sheet

CAS No: 9004- 32-4

Grade: Carboxymethyl Cellulose (CARBOTAL DGE 40)

Molecular Formula: $[C_6H_7O_2(OH)_2OCH_2COONa]_n$

Product Description

Carbotal DGE40 is a technical-grade Carboxymethyl Cellulose (CMC) developed specifically for the powder detergent industry. This water-soluble polymer, derived from natural cellulose, offers excellent anti-redeposition properties and improved cleaning efficiency. Its high purity and consistent performance make it an essential additive for both household and industrial laundry formulations.

Applications

Carbotal DGE40 is widely used in powder detergent systems that demand high wash performance, effective soil suspension, and fabric care. Its compatibility with a broad range of detergent components ensures formulation flexibility and stability.

Advantages

Carbotal DGE40 enhances cleaning by preventing soil redeposition and improving fabric penetration. It supports shorter wash cycles, contributes to fabric softness, minimizes skin irritation, and integrates seamlessly into modern detergent formulations.

Specifications

Standard	CARBOTAL DGE 40
Test Method	API 13A & ASTM
Appearance	Free-flowing white to creamish powder
Solubility in water	Completely soluble
Starch presence	Absent
Moisture Content (max. %)	10%
Brookfield Viscosity (2% soln, 25°C)	5 – 40 cps
pH (1% soln in deionized water)	7 – 11
Active Matter (Purity, min. %)	≥55%
Degree of Substitution	0.5 – 0.7
Bulk Density (kg/m ³ , min.)	≥1000
Particle Size – Passing 16 US mesh (1180 μm)	≤2%
Particle Size – Passing 30 US mesh (600 μm)	≤12%
Particle Size – Passing 200 US mesh (75 μm)	≥35%
Mesh Size	80 – 120 mesh

Usage and Dosage

Recommended dosage: 0.1% to 0.5% (calculated on a dry basis), or as per customer formulation procedures.

Packing and Storage

CARBOTAL DGE 40 is packaged in 25 kg or 50 lb. kraft paper bags, or as per customer requirements. Store in a dry, well-ventilated area with containers tightly closed. Keep away from heat, sparks, open flames, and incompatible materials. Follow standard warehouse practices for palletizing, banding, shrink-wrapping, and stacking.

Recommended Handling

All personnel handling this material must treat it as an industrial chemical, wearing appropriate protective equipment and observing the precautions described in the Safety Data Sheet (SDS).

The above information is best to our knowledge and provided for manufacturing purposes. Al Battal Factory for Chemical Industries Company makes no warranty or guarantee concerning the handling, use or application of such product whether alone or in combination with other products in case unexpected events occur. Users are advised to make their own tests to determine the suitability and performance of the product.