

# MTDA<sup>®</sup> B Grinding Aids

A Family of Grinding Aids from a Renewable Source 1



## Product Description

MTDA<sup>®</sup>B is a patented combination of traditional glycol and glycol from a renewable source. It is supplied as a non-toxic opaque liquid miscible with water. The renewable component in the formulation may vary from 20% to 80% depending upon the particular product selected. The various MTDA B renewable formulas have specifications that fall within the following ranges:

- Specific Gravity: 1.11 – 1.19
- pH: 6.0 – 10.0
- Total Solids: 69.0 – 81.0

## Viscosity

In general, pumpability of MTDA B will be similar to that of traditional grinding aids at comparable temperatures.

TEMPERATURE	MTDA B GRINDING AID PRODUCT LINE
68°F (20° C)	32 – 52 cP
41°F (5° C)	52 – 120 cP
-4°F (-20° C)	300 – 400 cP

## Product Advantages

- Lower grinding aid price/lb resulting from a low cost renewable ingredient
- Lower grinding aid cost per ton of cement produced
  - → Dosage may be equivalent to or slightly higher than traditional glycol grinding aids
- Grinding aid cost that is more stable over time because of price stability of renewable source
- Consistent additive quality due to GCP strict quality control specifications

## Handling

MTDA B may be sprayed as received into the mill's first compartment or added onto the clinker conveyor belt. Dilution with up to 8 parts water is recommended to ensure greater proportioning accuracy and better distribution of MTDA B. Suitable proportioning pumps with adjustable flow rates should be used for consistent performance of the additive.

## Addition Rates

The dosage rate of MTDA B will depend on the fineness and the reagglomeration characteristics of each cement. Typical dosage rates will vary from 0.02% - 0.06% by weight of cement for Types I & II cements and from 0.04% - 0.08% by weight of cement for Type III cements. Dosage rates may be similar to, or somewhat higher than, conventional glycol grinding aids. The optimum dosage rate must be determined during full scale cement mill testing.

## Dosing Equipment

GCP grinding aids should be accurately dispensed through a calibrated dosing system, suitable for the cement mill and output required.

## Specification Compliance

MTDA B is approved for use under ASTM C-465 specification as a non-harmful processing addition for cements.

<sup>1</sup>Use of formulations for cement grinding is covered under U.S. Patent Number 7922811.

## Packaging

MTDA B is supplied in bulk by tanker truck. It contains no flammable materials.

## Storage

Protect from freezing. Once frozen, the product should be thawed out slowly and re-mixed thoroughly prior to use.

## Technical Services

Field Engineers from GCP are available to assist in laboratory and mill test evaluations of MTDA B. Complete testing equipment and methods for analyzing mill performance and pack set index are also available during plant trials.

