

# **CUSTOM E - CERA**

Custom Enzymes – CERA is specifically designed and formulated blend of enzymes for use in the Ceramic Industry. Enzyme-mediated ceramic synthesis employs the use of a new type of processing technique which uses proteins or peptides as the mediators.

### **Product Specifications**

- Appearance: Off white granules
- Miscibility: Miscible in water
- Working pH range: 4-7
- Working Temperature range: 20-40 °C



### **Method**

CUSTOM E CERA forms a ceramic body in the following manner: The method is based on a process in which gelatine specific enzymes and urea are used. Urea is employed to prevent attraction between gelatine molecules when the dissolved hot gelatine solution cools down for preparing a well-dispersed suspension by ball milling and degassing at ambient conditions.



After CUSTOM E - CERA is added into the suspension, gelatine molecules attract each other and form a three-dimensional network through hydrogen bonding due to urea decomposition. Slurry containing alumina and gelatine could be consolidated in situ by the above gelation process at room temperature. A green body with homogeneous microstructure and smooth surface is obtained.

#### Custom Enzymes – CERA output:

- Controlled Site-selective synthesis
- Low temperature ceramic process
- Intact combination of ceramic with heat sensitive materials

#### <u>Dosage</u>

Recommended dosage: 200-500qm/ton, to be optimised based on requirements.

#### **Quality Certifications.**

• ISO 9001: 2015

Halal India

ISO 22000: 2018

DAR Kosher

## Safety and Enzyme Handling

Store Custom E – CERA in a cool, dry and shaded place, away from direct sunlight. Enzyme dust may cause irritation when inhaled. Unnecessary contact with the product should be avoided. The shelf life of this product under recommended storage conditions is one year.

# <u>Packaging</u>

The product is available in 1kg aluminium poly pouches. The packaging can be customised as per requirement.

#### <u>Technical Assistance</u>

Please contact us if you need more technical advice or assistance with this product