

Tetra Acetyl Ethylene Diamine TAED

Introduction

Oxygen-releasing materials have an important limitation, their activity is extremely temperature-dependent. Temperatures in excess of 60 DEG C are normally required to achieve any bleach effectiveness in an aqueous wash system. Especially for cleaning fabrics, high-temperature operation is both economically and practically disadvantageous. Thus bleaching activators have been applied in an object to activate bleaching reaction at low temperatures. These activators also known as bleach precursors, often appear in the form of carboxylic acid esters or amides.

In an aqueous liquor, anions of hydrogen peroxide react with the ester or amide to generate a corresponding perosyacid which oxidizes the stained substrate. Commercial application of this technology is found in certain fabric bleaching detergent powders that mainly incorporating tetra acetyl ethylene diamine (TAED). TAED used for detergent industry is in granular form, free-flowing, and has several colors (mainly white, green, blue) to choose depending on users choice.

Specification

Product Properties

Standard Specifications

Content %	92±2
Bulk Density, g/L	450-750
Particle Size Distribution, %	On 1.700mm Max. 1.0 Through 0.150mm Min. 3.0
Moisture, %	Max.2.0
Ferric, %	Max.0.002
Cuprum, %	Max.0.0004
Appearance	White or color granules
Packing	25kgs in Kraft paper bags plus PE liner

Application

TAED is typically applied in domestic laundry detergents, automatic dish washing, bleach boosters, laundry soak treatments, to improve the washing performance.

TAED could be applied in textile bleaching to react with hydrogen peroxide in the bleach bath to produce a stronger oxidant.

The use of TAED as bleach activator enables bleaching at lower process temperatures and under milder PH conditions. In pulp and paper industry TAED is suggested to react with hydrogen peroxide to form a pulp bleaching solution. The addition of TAED into pulp bleaching solution results in a satisfactory bleaching effect.