



Food Additives

DM STPP 107

Sodium triphosphate (Instant STPP)

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Product Description

DM STPP 107(E451(i)) is the sodium salt of the polyphosphate penta-anion. It is white powder. Its' melting point is 622°C. It is easily soluble in water.

Benefits

- DM STPP 107 is fine water solubility.
- White fine granular, instant in water and non-caking.
- DM STPP 107 has salient chelating capacity to ions of Ca, Mg etc.
- DM STPP 107 is a surfactant which has outstanding emulsification for lubricants and fat.
- DM STPP 107 has different bulk density, i.e. low density 0.35-0.5g/cm³, medium density 0.51-0.65g/cm³ and high density 0.66-0.9g/cm³.
- DM STPP 107 has two kinds of crystalline forms, namely Phase I (of high temperature) and Phase II (of low temperature).

The chemical characters of the two types are the same, and the difference between them lies in the thermo stability.

Specifications

Characteristics	Unit	Standard Request	Test Method
Main content (as Na ₅ P ₃ O ₁₀)	% (w/w)	95 Min	GB25566-2010
Water Insoluble matter	% (w/w)	0.05 Max	GB25566-2010
Arsenic (As)	ppm	3 Max	GB25566-2010
P ₂ O ₅	% (w/w)	56 Min	GB25566-2010
Heavy Metal (as Pb)	ppm	10 Max	GB25566-2010
pH value (1% aqueous solution)		9.5-10.0	GB25566-2010
Granularity (on sieve 1.00mm)	%	5.0 Max	GB25566-2010
SO ₄	% (w/w)	0.4Max	GB25566-2010
Whiteness	% (w/w)	85Min	GB25566-2010
Cadmium (Cd)	ppm	1 Max	GB25566-2010
Mercury (Hg)	ppm	0.5 ppm	GB25566-2010
Particle size through 60mesh	% (w/w)	87 Max	GB25566-2010
Bulk density	kg/l	0.4-0.5	GB25566-2010

¹⁾ Delivery specification: The product is monitored on a regular basis to ensure that it adheres to the specified values.

²⁾ Technical data: The technical data are used solely to describe the product and are not subject to regular monitoring.

Applications

DM STPP 107 may be used to improve the eating quality in food processing, especially in meat and fish products. In meat processing, mainly used in water retention, emulsification stability, juiciness and tenderness; Delaying the rate of oxidative spoilage; Improving color and maintaining flavor

It is also applied in pet food (e.g. cat and dog food) for the purpose of binding water and keeping the animal feed fresh.

Delivery Form

White powder or granular.

Packaging

DM STPP 107 is supplied in 25 kg bags / 1.000 kg shrink-wrapped pallets.

Storage

DM STPP 107 is in sealed containers at room temperature in a dry place. Partially emptied containers should be carefully resealed after use.

Minimum shelf life is 24 months from the date of shipping when stored according to the said conditions.

Contact Us

Please contact us for safety and regulatory details or the Material Safety Data Sheet (MSDS).