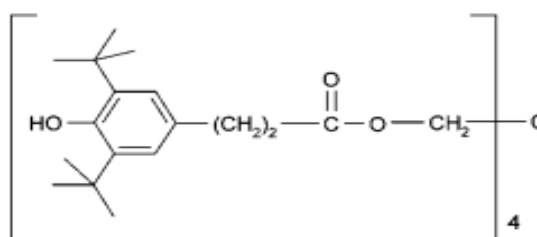


PUREstab 1010

Phenolic Primary Antioxidant for Processing and Long-Term Thermal Stabilization

Description **PUREstab 1010** is a high molecular weight hindered phenolic primary antioxidant. It is a highly effective, non-discoloring stabilizer for organic substrate such as plastics, elastomers, synthetics fibres, adhesive and sealant, wax, oil and fats. It protects these substrate against thermo-oxidative degradation.

Chemical Structure



Chemical name Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate)

CAS number 6683-19-8 **Molecular weight:** 1177.6 g/mol

Features & benefits **PUREstab 1010** has good compatibility, high resistance to extraction and low volatility. It is odorless and tasteless. The product can be used in combination with other additives such as co-stabilizers, e.g. thioethers (long term heat stabilizers), phosphites (secondary antioxidant), light stabilizers and other functional stabilizers. It is of particular interest to mention the enhanced effectiveness obtained by combining **PUREstab 1010** with PUREfos 168.

Applications **PUREstab 1010** is an efficient stabilizer for polyolefins, such as polyethylene, polypropylene, polybutene and olefin copolymers, such as EVA copolymers. Its use is also recommended for processing of polymers, such as polyacetals, polyamides and polyurethanes, polyesters, PVC, styrene homo- and copolymers, ABS, elastomers such as butyl rubber (IIR), SBS, SEBS, EPM and EPDM as well as other synthetic rubbers, adhesives, natural and synthetic tackifier resins.

Guidelines for Use-

Delivered at concentrations of 0.05% - 0.1%, **PUREstab 1010** is providing long-term thermal stability to the polymer. Nevertheless, concentrations up to several percent may be suitable depending on the requirement of the end application and the substrate to be stabilized.

In polyolefins the recommended concentration levels of **PUREstab 1010** range between 0.05% and 0.4% depending on the matrix, processing conditions and long-term thermal stability requirements. The optimum level has to be determined depending on the application requirement.

The concentration levels of **PUREstab 1010** recommended:

- in hot melt adhesives, is ranging from 0.2% to 1.0%
- in synthetic tackifier resins, is ranging from 0.1% and 0.5%.

TECHNICAL DATA SHEET

Polygel Product Management

Email: info@polygelbrunei.com



Handling & Safety

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid continuous or repetitive breathing of dust. Use only with adequate ventilation. Avoid dust formation and ignition sources. For more detailed information please refer to the material safety data sheet.

Storage

This product may be stored in a sealed container. Containers should be kept tightly closed when not in use and stored in a cool, dry place.

Physical Properties:

Product form	White free flow powder		
Melting range	110 - 125°C		
Vapor pressure	7E-10 pa		
Flash Point	>297°C		
Bulk density	480 - 630 g/l		
Solubility (20°C) g/100g solution	Solubility (20°C) g/100g solution		
- Acetone	47	- Chloroform	71
- Ethyl-acetate	47	- Ethanol	1.5
- Methanol	0.9	- n-hexane	0.3
- Methylene Chloride	63	- Water	<0.01

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November, 2019