

PowerNox™ MD697 Antioxidant

Introduction PowerNox™ MD697 is a highly effective metal deactivator originated from

the family of sterically hindered phenolic antioxidants. Due to its low volatility and no discoloring properties, PowerNox[™]697 is ideal for the polymer systems of polyolefins, polyesters, polyamides, and polyurethane.

Chemical Name 2,2'-Oxamido bis[ethyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl) -propionate]

CAS Number 70331-94-1

EINECS Number 274-572-7

Chemical Structure

$$\begin{array}{c} H_3C \\ H_3C \\ H_3C \\ H_3C \\ CH_3 \\ \end{array}$$

 $\begin{array}{ccc} \textbf{Chemical Formula} & & C_{40}H_{60}N_2O_8 \\ \end{array}$

Molecular Weight 697

Physical Properties

Appearance	White to Off-White Powder
Melting Point (°C)	170-180
Volatile Loss (%)	Max.0.3
Color of Solution 425nm (%)	Min.97
Color of Solution 500nm (%)	Min.98
Flash Point (°C)	260
Specific Gravity (20°C)	1.08
Ash (%)	Max.0.1
Purity (%)	Min.98



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Solubility

Solubility [20°C]	% w/w
Acetone	10
Chloroform	35
Styrene	5
n-Hexane	0.03
Methanol	1.6
Water	<0.01

Benefits & Applications

PowerNox[™] MD697 has low volatility and therefore provides long-term heat aging and high temperature processing stability.

The main application for PowerNox[™] MD697 is in the long-term heat stabilization of polyolefins that are in contact with metal ions. Such applications include wire and cable conductors and molded parts having metal inserts.

Handling & Storage

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. Protect skin. Avoid dust formation and ignition sources.

This product may be stored up to one year in a sealed container. Containers should be stored in a cool, dry area. Extended storage at elevated temperatures or exposure to direct heat or sunlight could reduce product life. Keep containers sealed when not in use.

For more detailed information please refer to the material safety data sheet.

Packing

PowerNox[™] MD697 is supplied in 20Kg Paper Bag, 20Kg PE Bag, 25Kg Carton Box, and 50Kg Fiber Drum.

Note

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.



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