

PowerNox™ 1680 Antioxidant

Introduction PowerNox[™] 1680 is a secondary antioxidant for organic polymers.

Applications include polyolefins, polycarbonate, polyester, and styrenics.

Chemical Name Tris(2,4-di-tert-butylphenyl) phosphite

CAS Number 31570-04-4

EINECS Number 250-709-6

Chemical Structure

$$H_3C$$
 H_3C
 H_3C
 CH_3
 CH_3

Molecular Weight 647

Physical Properties

| Appearance | White Crystal Powder |
|-----------------------------|----------------------|
| Specific gravity | 1.03 |
| Melting Point (°C) | 183-186 |
| Acid Value (mg KOH/g) | Max.0.2 |
| Volatile Loss (%) | Max.0.3 |
| Color of Solution 425nm (%) | Min.97 |



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| Color of Solution 500nm (%) | Min.98 |
|-----------------------------|---------|
| Ash (%) | Max.0.1 |
| 2,4-DTBP Content (%) | Max.0.2 |
| Purity (%) | Min.99 |

Solubility

| Solubility [20°C] | % w/w |
|-------------------|-------|
| Acetone | 1.8 |
| Benzene | 34 |
| Chloroform | 36 |
| Cyclohexane | 16 |
| Ethyl acetate | 4 |
| n-Hexane | 11 |
| Methanol | <0.01 |
| Dichloromethane | 36 |
| Toluene | 40.5 |
| Water | <0.01 |

Benefits & Applications

PowerNox[™] 1680 can be used as melt flow and color protection during thermal processing of polymers.

PowerNox[™] 1680 can be used in combination with hindered phenol.

PowerNox[™] 1680 can be used with benzotriazoles and HALS for thermal and light stabilization in outdoor use.

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.



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

Packing PowerNox™ 1680 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.

We specifically disclaim any other express or implied warranty of fitness for

a particular purpose or merchantability.

We disclaim liability for any incidental or consequential damages.