

DOVERPHOS HIPURE 4-HR PLUS

Trisnonylphenyl Phosphite

Doverphos HiPure 4-HR+ is trisnonylphenyl phosphite (TNPP) with approximately 1.00% triisopropanolamine and less than 0.1% residual nonyl phenol. It is an aryl phosphite with high molecular weight and low phosphorus content. **Doverphos HiPure 4-HR+** is an effective liquid phosphite heat stabilizer for a wide variety of applications. These include polyolefin, acrylics, adhesives, elastomers, nylon, polycarbonate, polyurethanes, polystyrene, PVC, coatings, ABS, and polyethylene terephthalate. The effectiveness of **Doverphos HiPure 4-HR+** is enhanced by the addition of other stabilizers like hindered phenols. Typical use levels range from 0.05 to 3.00% for most applications. **Doverphos HiPure 4-HR+** is sanctioned under FDA regulations for use in many applications.

 $(C_9H_{19}-C_6H_4O)_3P$

Trisnonylphenyl Phosphite

TYPICAL PROPERTIES

| Property | Typical Result | |
|-----------------------|----------------|--|
| Appearance | Clear Liquid* | |
| Molecular Weight | 688 | |
| Phosphorus, % | 4.3 | |
| Density, lb/gal | 8.2 | |
| Viscosity, cps @ 25°C | 8,600 | |

^{*}Below 60°C appearance is hazy.

Above 60°C haze will disappear, leaving a clear product.

SPECIFICATIONS

| Parameter | Specification | Test Method |
|-------------------------------|---------------|-------------|
| Color, APHA | 75 max | ASTM D1209 |
| Acid Number, mgKOH/gm | 0.2 max | ASTM D3242 |
| Refractive Index, 25°C | 1.5265-1.5290 | ASTM D1218 |
| Specific Gravity, 25°C/15.5°C | 0.980-0.997 | ASTM D1298 |
| Free Nonylphenol, % | <0.1 | DP260 |

The information contained on this data sheet is believed to be reliable. Since the conditions of application and use of our products are beyond our control, no warranty is expressed or implied regarding accuracy of the information, the results obtained from the use of the product, or that such use will not infringe on any patent. This information is furnished with the express condition that you will conduct your own tests to determine the suitability of the product for your particular use. (021821)

CHLOREZ®, CHLOROWAX®, CHLOROWAX 50®, DOVERHIB®, DOVERLUBE®, DOVERNOX®, DOVERPHOS®, DOVERPHOS® HIPURE, DOVERPHOS LGP-11®, DOVERPHOS S-9228®, LUBE-BOOSTER®, MAYCO®, PAROIL®, SUL-PERM®, and SYNKAD® are federally registered trademarks of Dover Chemical Corporation.