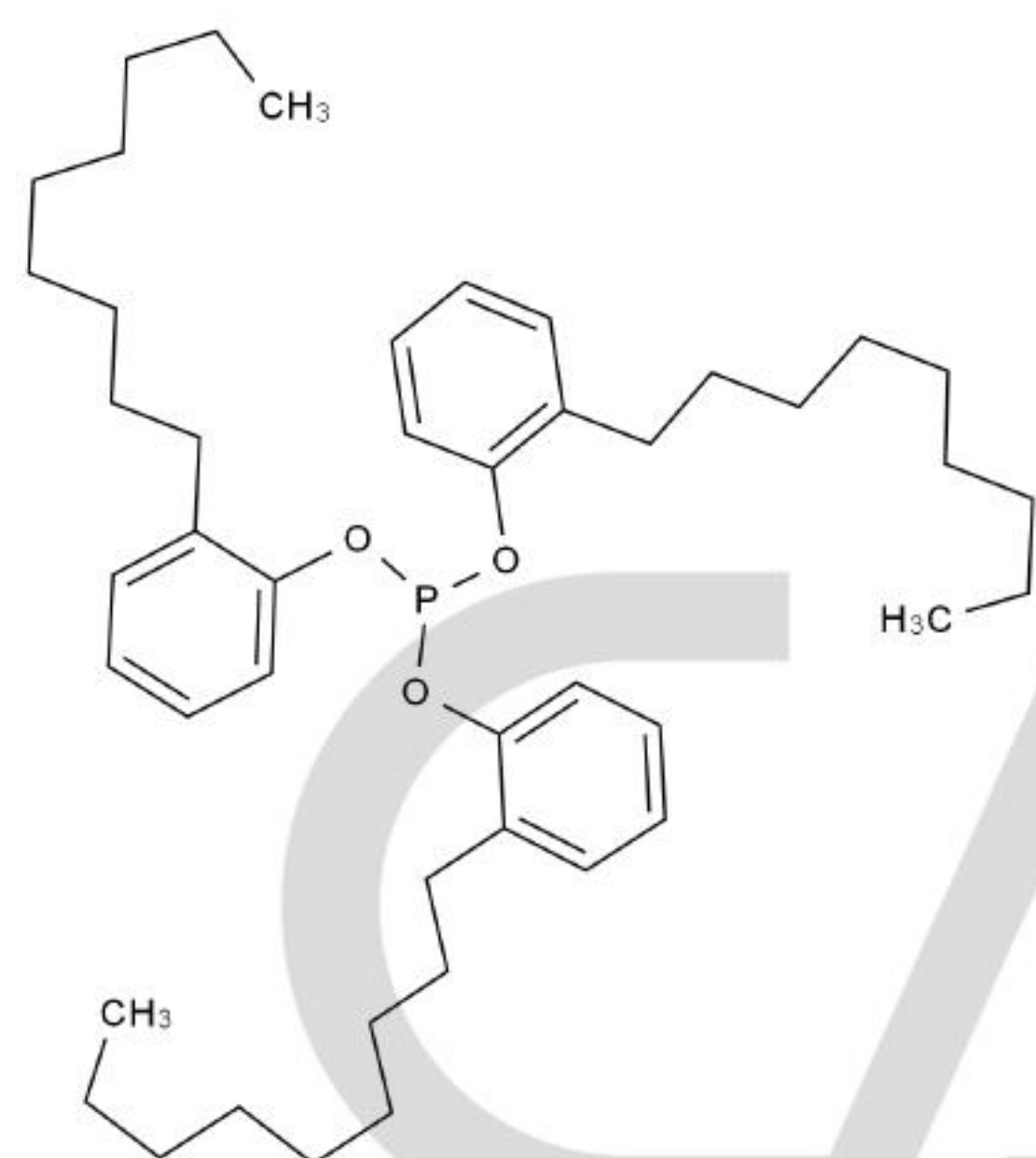


# Certificate of Analysis

## Reference Material & Standard

|                           |                                                  |                          |                                                                                     |
|---------------------------|--------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------|
| <b>Product Name:</b>      | Tris(Nonylphenyl) Phosphite                      | <b>Catalogue Number:</b> | CWLT600598                                                                          |
| <b>Synonyms:</b>          | N/A                                              | <b>Lot Number:</b>       | 0514-RA-0003                                                                        |
| <b>CAS Number:</b>        | 26523-78-4                                       | <b>Expiry Date:</b>      | May 18, 2029                                                                        |
| <b>Molecular Formula:</b> | C <sub>45</sub> H <sub>69</sub> O <sub>3</sub> P | <b>Storage:</b>          | Room Temp Protected from light and Sealed                                           |
| <b>Molecular Weight:</b>  | 689.00                                           | <b>Warning:</b>          |  |

Chemical Structure:



| Test Items     | Method            | Results        |
|----------------|-------------------|----------------|
| Appearance     | Visual inspection | Colourless Oil |
| Identification | GCMS              | Confirmed      |
| Purity         | GC                | 100.000%       |
| Loss On Drying | TGA               | 1.1512%        |
| Assay          |                   | 98.8%          |
| Uncertainty    |                   | ±0.2%          |

## Comment:

- Mixture of isomers.
- The calculation of the 100% method follows the formula (calculated on the non-dried basis):  

$$\text{Assay (\%)} = (100\% - \text{Loss On Drying}) * \text{Purity GC (\%)} / 100\%$$
 Loss On Drying is considered as absolute effect, GC purity is considered as relative effect.
- The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

## Signature:

Prepared by:

*Lisa*

Reviewed by:

*Hinlam*

Approved by General Manager:

*David*

Date: May 20, 2025

Date: May 20, 2025

Date: May 20, 2025

