



Specification

8.17074.0000 Butylhydroxytoluene E 321

Specification		
Assay (GC)	≥ 99.0	%
Assay (HPLC)	99.0 - 101.5	%
Identity (Identification 1 (JPE))	passes test	
Identity (IR-spectrum)	passes test	
Identity (Identification 2 (JPE))	passes test	
Identity (HPLC)	passes test	
Appearance	White to yellowish crystalline powder.	
Appearance of solution (100 g/l, Methanol (Ph Eur))	Clear and not more intense in color than reference solution Y _s or BY _s .	
Appearance of solution (100 g/l, Ethanol (95 %) (JPE))	Clear and colorless.	
Solidification temperature	69.2 - 70.0	°C
Melting point	69.5 - 72.0	°C
Absorption maximum λ_{max} (Ethanol abs.)	277 - 279	nm
Specific absorptivity A 1%/1cm (λ_{max} : 0.02 g/l; ethanol abs.)	81 - 88	
Specific Absorptivity A 1%/1cm ($\lambda_{278 \text{ nm}}$: 0.05 g/l; ethanol (95 %))	82 - 88	
Heavy metals (as Pb)	≤ 20	ppm
Sulfate (SO ₄)	≤ 150	ppm
As (Arsenic)	≤ 3	ppm
Hg (Mercury)	≤ 1	ppm
Pb (Lead)	≤ 2	ppm
p-Cresol	≤ 0.1	%
Methanol (HS-GC)	≤ 3000	ppm
Toluene (HS-GC)	≤ 890	ppm
Related substances (TLC)	≤ 0.5	%
Related substances (HPLC) (p-Cresol or m-cresol)	≤ 0.1	%
Related substances (HPLC) (3-tert-butyl-4-hydroxyanisole)	≤ 0.1	%
Related substances (HPLC) (3,5-Di-tert-butyl-4-hydroxybenzoic acid)	≤ 0.1	%
Related substances (HPLC) (2-tert-Butyl-4-methylphenol or 2-tert-butyl-5-methylphenol)	≤ 0.1	%
Related substances (HPLC) (3,5-Di-tert-butyl-4-hydroxy benzaldehyde)	≤ 0.1	%
Related substances (HPLC) (4,6-Di-tert-butyl-m-cresol)	≤ 0.1	%

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Related substances (HPLC) (2,6-Di-tert-butylphenol)	≤ 0.1	%
Related substances (HPLC) (Any unspecified impurity)	≤ 0.1	%
Related substances (HPLC) (Sum of all impurities)	≤ 0.7	%
Other residual solvents (ICH Q3C)	excluded by the production process	
Sulfated ash (600 °C)	≤ 0.002	%
Water (according to Karl Fischer)	≤ 0.2	%

Meets analytical specifications of Ph Eur, NF, JPE.

The information provided does not imply the suitability of the product for any particular application. It is customer's sole responsibility, prior to use, to determine that the product is suitable and permitted for the customer's intended use and application.
Conforms to the purity criteria on food additives according to the current European Commission Regulation.

Dr. Sebastian Lips

Responsible laboratory manager quality control

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