

# TECHNICAL DATA SHEET



Trade name : Piperonyl Butoxide BPV

THE PRODUCT COMPLIES WITH PIPERONYL BUTOXIDE BRITISH PHARMACOPOEIA (VET) MONOGRAPH

## CHEMICAL IDENTIFICATION

**Definition** : Not less than 94.0 % of  $C_{19}H_{30}O_5$

### Nomenclature

Common name : Piperonyl Butoxide

IUPAC name : 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole

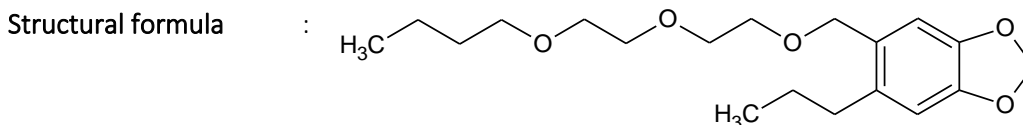
CA name : 1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-

**CAS number** : 51-03-6

**EC number** : 200-076-7

**Molecular formula** :  $C_{19}H_{30}O_5$

**Molecular weight** : 338.40



## PRODUCT SPECIFICATIONS

**Chemical assay** (ENDQC- 710 method by HRGC)

<b>Piperonyl Butoxide</b>	:	<b>≥ 94.0 % w/w</b>
Butyl Carbitol® (Diethylene glycol butyl ether)	:	≤ 2.0 % a/a
Dipiperonyl methane	:	≤ 2.0 % a/a
Dipiperonyl ether	:	≤ 1.5 % a/a
Dihydrosafrole	:	≤ 50 mg/kg
Any other secondary peaks (total) with an area ≥ 0.1 % , other than Butol, DPM, DPE, DHS	:	≤ 0.5 % a/a
Sum of all secondary peaks	:	≤ 2.5 % a/a

*NOTE: Endura reserves the right to make amendments to the data reported in this sheet either in compliance to any official body's updating or in agreement with Internal Company decisions.  
The reported information is, to the best of our knowledge, as accurate and complete as possible and is given in good faith but without warranty from our part. Any use for Registration purposes must be authorised by Endura in advance.*

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Trade name : Piperonyl Butoxide BPV

## PRODUCT SPECIFICATIONS (continues)

Density (ENDQC-4 method)	:	1.050-1.065 g/cm <sup>3</sup> at 20°C
Colour (ENDQC-7 method)	:	≤ 2.5 (Gardner scale)
Appearance (visual method)	:	Clear oily liquid, colourless to light yellow
Refractive index (Ph. Eur. 2.2.6.)*	:	1.494-1.504 n <sup>20</sup> <sub>D</sub>
Sulphated ash (Ph. Eur. 2.4.14)**	:	≤ 0.2 % w/w

\* Equivalent to the BP Vet Method reported in Appendix V E.

\*\* Equivalent to the BP Vet Method reported in Appendix IX A, Method II.

## ADDITIONAL INFORMATION

Odour	:	Slightly aromatic
Boiling point	:	203 °C at 278 Pa
Vapour pressure	:	2.11 x 10 <sup>-7</sup> hPa at 60°C
Flash point	:	179.2 °C
Solubility	:	Soluble in all common organic solvents (n-hexane, toluene, 1,2-dichloroethane, 2-propanol, acetone, ethyl acetate), including mineral oils.
Partition coefficient (Log Pow)	:	4.8
Identification		
UV-vis spectra (220-350 nm)	:	Well defined maxima at 238 nm and 290 nm.
IR spectra		Concordant with the reference spectrum of Piperonyl Butoxide.

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