



>>Entry Name: Bis(2-ethylhexyl) decanedioate

Synonym(s): Bis(2-ethylhexyl) sebacate. Di(2-ethylhexyl) sebacate. Bisoflex. Edenol 888. Ergoplast SDO. Octoil S. Plectol. Many other names

CAS Registry Number: 122-62-3

$\text{H}_3\text{C}(\text{CH}_2)_3\text{CH}(\text{CH}_2\text{CH}_3)\text{CH}_2\text{OOC}(\text{CH}_2)_8\text{COOCH}_2\text{CH}(\text{CH}_2\text{CH}_3)(\text{CH}_2)_3\text{CH}_3$

Molecular Formula: $\text{C}_{26}\text{H}_{50}\text{O}_4$

Molecular Weight: 426.679

Accurate Mass: 426.37091

Percentage Composition: C 73.19%; H 11.81%; O 15.00%

Use/Importance: Used in inks, lubricating oils, hydraulic fluids, plasticisers, coatings. Glc stationary phase

Physical Description: Liq.

Melting Point: Mp -48°

Boiling Point: Bp₅ 256°

Solubility: Sol. EtOH, C_6H_6 , Me_2CO

Density: d_4^{20} 0.914

Refractive Index: n_D^{25} 1.4496

Other Data: The coml. prod. will be a mixt. of diastereoisomers expected to have v. similar props.

Hazard & Toxicity: LD₅₀ (rat, orl) *ca.* 13000 mg/kg

Aldrich: 29083-1

Fluka: 84822

Rare Chemicals Library: S55731-5

Sigma: S3125

References:

Aldrich Library of ¹³C and ¹H FT NMR Spectra, 1992, **1**, 946A, (nmr)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 645D, (ir)

Reith, H. *et al.*, *CA*, 1963, **59**, 11159b, (props)

Durr, A.M. *et al.*, *Prepr.- Am. Chem. Soc., Div. Pet. Chem.*, 1963, **8**, 49, (synth, props)

Wood, G.M. *et al.*, *J. Vac. Sci. Technol.*, 1969, **6**, 871; *CA*, **71**, 126859w, (ms)

Fr. Pat., 1973, 2 151 525; *CA*, **79**, 52813t, (synth, purifn)

Reglero, G. *et al.*, *Chromatographia*, 1986, **22**, 358, (glc)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, BJS250