Darwin Chemical Company
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Plantation FL 33324-1311

Diisobutyl Ketone DIBK

Diisobutyl Ketone DIBK, 2,6-dimethylheptan-4-heptanone

Catalog Nr. Q014

Definition DIBK is a slow evaporating, low density solvent that has good solvency for many synthetic resins including Nitrocellulose, rosin esthers, phenolics, hydrocarbons, alkyds, polyesters, and acrylics. It is useful as a retarder solvent to improve flow and minimize humidity blushing.

CAS Number 108-83-8

Application Automotive OEM, coatings for Automotive plastics, Coalescing aid for Nitrocellulose lacquer emulsions Coalescing aid, Coatings for special purposes, Replacement for Exxate 600 blends, Roll-coating inks, viscosity modifier in poly-vinyl chloride organosols

Technical Data

Molecular weight	142.33
Color (pt-Co)	20 max
Empirical Formula	C9H18O
Specific gravity	0.811
Wt/Vol @ 20 C	0.81 kg/l (6.76 lb/gal)
Solubility (in Water @ 20C)	0.05 wt %
Solubility (water In @ 20C)	0.7 wt %
Evaporation rate (n-butyl Acetate =1)	0.2
Evaporation rate (ether=1)	60.5
Dilution ratio (Toluene)	1.5
Dilution ratio (VMP Naphta)	0.8
Refractive Index @ 20C	1.415
Vapor density (air=1)	4.9
Vapor pressure @ 20C	1.4 mm Hg
Vapor pressure @ 55C	1.4 Kpa
Boiling point @ 760 mm Hg	163 C/ 325 F (Initial)
Boiling point @ 760 mm Hg	176 C/ 348 F (dry point)
Freezing point	-42C (-43F)
Flash point Tag closed cup	49 C (120F)
Autoignition temperature	396C (745F)
Azeotropes BP	97C (206.6F)
Azeotropes wt % in water	51.9 wt %
Hansen solubility parameters	
Non polar	7.6
Polar	1.8
Hydrogen bonding	2
Total	8
Surface Tension @ 20C	24.6 dynes/cm
TLV PPM 1998	25
Blush resistance @ 26.7C (80F)	95% RH
Electrical resistance	0.4 megaohms
Critical temperature	341.8 C
Critical pressure	24.5 ATM
Critical volume	522 ml/g-mol
Expansion coefficient, per C @ 20C	0.00102