



Product name	MasimoSol D90
Product Category	Aliphatic Mineral Spirits
CAS Registry Number	64742-47-8
EINECS Number	265-149-8
Description	MasimoSol D90 consists predominantly of C12- C16 paraffins and naphthenes. Deep hydrogenation gives this solvent a very low aromatic content, negligible amount of reactive impurities and a low, sweet odour.

Typical Properties

Properties	Unit	Method	Value
Water	% m/m	ASTM D1364	< 0.005
Density @ 15°C	kg/L	ASTM D4052	0.801
Coefficient of Cubic Expansion @ 20°C	10 ⁻⁴ /°C	Calculated	9
Refractive Index @ 20°C	-	ASTM D1218	1.442
Colour	Saybolt	ASTM D156	+28
Bromine Index	mg Br/100g	ASTM D1492	< 10
Copper Corrosion (1hr @ 100°C)	-	ASTM D130	1
Doctor Test	-	ASTM D4952	Negative
Non Volatile Matter	mg/100ml	ASTM D1353	1
Distillation, Initial Boiling Point	°C	ASTM D86	220
Distillation, Dry Point	°C	ASTM D86	268
Relative Evaporation Rate (nB u Ac = 1)	-	ASTM D3539	< 0.01
Relative Evaporation Rate (Ether=1)	-	DIN 53170	> 3900
Antoine Constant A #	kPa, °C	-	7.76180
Antoine Constant B #	kPa, °C	-	2999.61
Antoine Constant C #	kPa, °C	-	289.400

Antoine Constants: Temperature range	°C	-	+20 to +120
Vapor Pressure @ 0°C	kPa	Calculated	< 0.01
Vapor Pressure @ 20°C	kPa	Calculated	0.01
Saturated Vapor Concentration @ 20°C	g/m ³	Calculated	0.9
Paraffins	% m/m	GC	55
Naphthenes	% m/m	GC	45
Aromatics	mg/kg	SMS 2728	200
Benzene	mg/kg	GC	< 3
Sulfur	mg/kg	ISO 20846	< 0.5
Flash Point	°C	ASTM D93	92
Lower Explosion Limit in Air	% v/v		0.6
Upper Explosion Limit in Air	% v/v		5.5
Auto Ignition Temperature	°C	ASTM E659	231
Electrical Conductivity @ 20°C	pS/m	ASTM D4308	< 1
Dielectric Constant @ 20°C	-	-	2.1
Aniline Point	°C	ASTM D611	80
Kauri-Butanol Value	-	ASTM D1133	27
Pour Point	°C	ASTM D97	-30
Viscosity @ 25°C	<u>mm²/s</u>	ASTM D445	2.6
Surface Tension @ 20°C	mN/m	Du Nouy ring	26
Thermal Conductivity @ 20°C	W/m°C		0.14
Hildebrand Solubility Parameter	(cal/cm ³) ^{1/2}	-	7.6
Hydrogen Bonding Index	-	-	0
Fractional Polarity	-	-	0
Heat of Vaporization at R _{boil}	kJ/kg	-	250
Heat of Combustion (Net) @ 25°C	kJ/kg	-	45000



Specific Heat @ 20°C	kJ/kg/°C	-	1.9
Molecular Weigh	g/mol	Calculated	190

(#) In the Antoine temperature range, the vapor pressure P (kPa) at temperature T (°C) can be calculated by means of the Antoine equation $\log P = A - B/T+C$

Test Methods

Copies of copyrighted test methods can be obtained from the issuing organisations:

American Society for Testing and Materials (ASTM): www.astm.org

International Organization for Standardization (ISO): www.iso.org

Deutsches Institut für Normung (DIN): www.din.de

For routine quality control analyses, local test methods may be applied that are different from those mentioned in this datasheet. Such methods have been validated and can be obtained through your local Masimo Chemicals South Africa Company.

Quality

MasimoSol D90 as produced, meets the volatile organic compound (VOC) exemption criteria and definition of LVP-VOC as established in CARB's Consumer Products Regulation; in the USEPA's National Volatile Organic Compound Emissions Standards for Consumer Products; and in the Model Rule for Consumer Products as adopted by the Ozone Transport Commission (OTC). Due to their low volatility and photochemical reactivity, these LVP-VOCs are fully exempt and non-reportable VOCs in calculations of the VOC contents of regulated consumer product categories. MasimoSol D90 does not contain detectable quantities of polycyclic aromatics, heavy metals or chlorinated compounds.

Hazard Information

For detailed Hazard Information please refer to the Material Safety Data Sheet on www.masimochem.com/.

Storage and Handling

Provided proper storage and handling precautions are taken, we would expect the product to be technically stable for at least 12 months. For detailed advice on Storage and Handling, please refer to the Material Safety Data Sheet on www.masimochem.com/.

Warranty/Disclaimer

All products purchased or supplied by Masimo Chemicals companies are subject to the terms and conditions set out in the contract, order confirmation and/or bill of lading. All other information supplied by Masimo Chemicals companies, including that herein, is considered accurate but is furnished upon the express condition that the customer shall make its own assessment to determine a product's suitability for a particular purpose. Except as may be set forth in the applicable contract, order confirmation and/or bill



of lading, Masimo Chemicals companies make no warranty, express or implied, including regarding any information supplied or the data upon which it is based on the results to be obtained from the use of such products or information, or concerning product, whether of satisfactory quality, merchantability, fitness for any particular purpose or otherwise, or with respect to intellectual property infringement as a result of use of information or products, and none shall be implied.