

**Trade Name** MasimoSol D100

**Product Code** MAS 2003

**Region** Africa

**Product Category** Aliphatic

**CAS Registry** 64742-47-8

**EINCES Number** 265-149-8

**Description** MasimoSol D100 consists predominantly of C13- C15 paraffins and naphthenes. Deep hydrogenation gives this solvent a very low aromatic content, negligible amount of reactive impurities and a low, sweet odour. Product, 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

### Typical Properties

Property	Unit	Method	Value
Density @15°C	kg/l	ASTM D4052	0.797
Density @20°C	kg/l	ASTM D4052	0.794
Cubic Expansion Coefficient @20°C	(10 <sup>-4</sup> )/°C	Calculated	9
Refractive Index @20°C	-	ASTM D1218	1.441
Color	Saybolt	ASTM D156	30
Bromine Index	mg Br/100g	ASTM D1492	< 10
Copper Corrosion (3hr @100°C)	-	ASTM D130	1
Distillation, IBP	°C	ASTM D86	236
Distillation, EP	°C	ASTM D86	264
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	< 0.01
Antoine Constant A #	kPa, °C	-	7.4189
Antoine Constant B #	kPa, °C	-	2603.5
Antoine Constant C #	kPa, °C	-	241.46
Antoine Constants:	Temperature range °C	-	0 to +100
Surface Tension @ 20°C	mN/m	Du Nouy ring	26
Hildebrand Solubility Parameter	(cal/cm <sup>3</sup> ) <sup>1/2</sup>	-	7.9
Hydrogen Bonding Index	-	-	0.5
Fractional Polarity	-	-	0
Molecular Weight	g/mol	Calculated	137

Property	Unit	Method	Value
Vapour Pressure @0°C	kPa	Calculated	< 0.01
Vapour Pressure @20°C	kPa	Calculated	< 0.01
Saturated Vapor Concentration @20°C	g/m <sup>3</sup>	Calculated	0.2
Paraffins	% m/m	GC	60
Naphthenes	% m/m	GC	40
Aromatics	mg/kg	SMS 2728	200
Benzene	mg/kg	GC	< 3
Sulfur	mg/kg	ISO 20846	< 0.5
Flash Point	°C	ASTM D93	103
Auto Ignition Temperature	°C	ASTM E659	232
Explosion Limit: Lower	%v/v	-	0.5
Explosion Limit: Upper	%v/v	-	5.5
Electrical Conductivity @20°C	pS/m	ASTM D4308	< 1
Aniline Point	°C	ASTM D611	83
Kauri-Butanol Value	-	ASTM D1133	26
Pour Point	°C	ASTM D97	-26
Surface Tension @20°C	mN/m	Du Nouy ring	28
Viscosity @25°C	mm <sup>2</sup> /s	ASTM D445	2.9
Viscosity @40°C	mm <sup>2</sup> /s	ASTM D445	2.2
Hildebrand Solubility Parameter	(cal/cm <sup>3</sup> ) <sup>½</sup>	-	7.5
Hydrogen Bonding Index	-	-	0
Fractional Polarity	-	-	0
Heat of Vaporization @Tboil	kJ/kg	-	250
Heat of Combustion (Net) @25°C	kJ/kg	-	45000
Specific Heat @20°C	kJ/kg/°C	-	2.1
Molecular Weight	g/mol	Calculated	206

(#) In the Antoine temperature range, the vapour 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](http://www.astm.org)  
Energy Institute (IP) : [www.energyinst.org.uk](http://www.energyinst.org.uk)

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 (Pty) Ltd company.

### Quality

MasimoSol D100 does not contain detectable quantities of polycyclic aromatics, heavy metals or chlorinated compounds

### 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](http://www.masimochem.com)

### Hazard Information

For detailed Hazard Information please refer to the Material Safety Data Sheet on [www.masimochem.com](http://www.masimochem.com)

### Trademark

MasimoSol is a Masimo Chemicals South Africa (Pty) Ltd trademark identity.

### Warranty / Disclaimer

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