



ShellSol D70

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| Product Code | Q7712 |
| Region | Europe |
| Product Category | Aliphatic Mineral Spirits |
| CAS Registry Number | 64742-47-8 |
| EINECS Number | 265-149-8 |
| Description | ShellSol D70 consists predominantly of C11- C14 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

| Property | Unit | Method | Value |
|--------------------------------------|----------------------|------------|----------|
| Water | % m/m | ASTM D1364 | < 0.005 |
| Density @15°C | kg/L | ASTM D4052 | 0.796 |
| Coefficient of Cubic Expansion @20°C | 10 ⁻⁴ /°C | Calculated | 9 |
| Refractive Index @20°C | - | ASTM D1218 | 1.439 |
| Colour | Saybolt | ASTM D156 | +30 |
| 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 | 203 |
| Distillation, Dry Point | °C | ASTM D86 | 237 |
| Relative Evaporation Rate (nBuAc=1) | - | ASTM D3539 | 0.01 |
| Relative Evaporation Rate (Ether=1) | - | DIN 53170 | 800 |
| Antoine Constant A # | kPa, °C | - | 5.99080 |
| Antoine Constant B # | kPa, °C | - | 1753.00 |
| Antoine Constant C # | kPa, °C | - | 221.030 |

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|---|---------------------------------------|--------------|-------------|
| Antoine Constants: Temperature range | °C | - | +80 to +215 |
| Vapor Pressure @ 0°C | kPa | Calculated | 0.01 |
| Vapor Pressure @ 20°C | kPa | Calculated | 0.05 |
| Saturated Vapor Concentration @ 20°C | g/m ³ | Calculated | 4 |
| Paraffins | % m/m | GC | 50 |
| Naphthenes | % m/m | GC | 50 |
| Aromatics | mg/kg | SMS 2728 | < 200 |
| Benzene | mg/kg | GC | < 3 |
| Sulfur | mg/kg | ISO 20846 | < 0.5 |
| Flash Point | °C | ASTM D93 | 78 |
| Lower Explosion Limit in Air | % v/v | | 0.6 |
| Upper Explosion Limit in Air | % v/v | | 5.5 |
| Auto Ignition Temperature | °C | ASTM E659 | 236 |
| Electrical Conductivity @ 20°C | pS/m | ASTM D4308 | < 1 |
| Dielectric Constant @ 20°C | - | - | 2.1 |
| Aniline Point | °C | ASTM D611 | 76 |
| Kauri-Butanol Value | - | ASTM D1133 | 29 |
| Pour Point | °C | ASTM D97 | < -50 |
| Viscosity @ 25°C | mm ² /s | ASTM D445 | 2.0 |
| 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 T _{boil} | kJ/kg | - | 250 |
| Heat of Combustion (Net) @ t 25°C | kJ/kg | - | 45000 |
| Specific Heat @ 20°C | kJ/kg/°C | - | 2.0 |
| Molecular Weight | g/mol | Calculated | 174 |

(#) 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

Shell Method Series (SMS) methods are issued by Shell Global Solutions International B.V., Shell Technology Centre, Amsterdam, The Netherlands. Requests for copies of SMS can be made through your local Shell Chemicals company.

N.B: For routine quality control local test methods may be applied. Such methods have been validated against those mentioned in this datasheet.

Quality

ShellSol D70 does not contain detectable quantities of polycyclic aromatics, heavy metals or chlorinated compounds.

Hazard Information

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

Storage Handling

Provided proper storage and handling precautions are taken we would expect ShellSol D70 to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Safety Data Sheet on www.shell.com/chemicals.

Trademark

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