Shell Chemicals

**Data Sheet**

**Issued:**

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**Product Name**

# SBP 100/140

**Product Code** **Q5811** **Europe**

**Product Category** **Special Boiling Point Solvents**

**CAS Registry Number** 64742-49-0

**EINECS Number** 265-151-9

**Description** SBP 100/140 is a C7-C9 hydrocarbon solvent. Being made from hydrogenated feedstock, its aromatics and olefins content is very low.

**Typical Properties**

| Property | Unit | Method | Value |
|---|---|---|---|
| Density @15°C | kg/l | ASTM D4052 | 0.728 |
| Cubic Expansion Coefficient @20°C | (10^-4)/°C | Calculated | 12 |
| Refractive Index @20°C | - | ASTM D1218 | 1.405 |
| Color | Saybolt | ASTM D156 | +30 |
| Bromine Index | mg Br/100g | ASTM D1492 | < 5 |
| Copper Corrosion (3hr @100°C) | - | ASTM D130 | 1 |
| Doctor Test | - | ASTM D235 | Negative |
| Non Volatile Matter | mg/100ml | ASTM D1353 | 1 |
| Distillation, IBP | °C | ASTM D1078 | 106 |
| Distillation, DP | °C | ASTM D1078 | 136 |
| Relative Evaporation Rate (nBuAc=1) | - | ASTM D3539 | 1.9 |
| Relative Evaporation Rate (Ether=1) | - | DIN 53170 | 6 |
| Antoine Constant A # | kPa, °C | - | 7.51210 |
| Antoine Constant B # | kPa, °C | - | 2541.50 |
| Antoine Constant C # | kPa, °C | - | 349.980 |
| Antoine Constants: Temperature range | °C | - | +40 to +105 |
| Vapor Pressure @0°C | kPa | Calculated | 1.8 |
| Vapor Pressure @20°C | kPa | Calculated | 4.4 |
| Saturated Vapor Concentration @20°C | g/m³ | Calculated | 198 |
| Paraffins | % m/m | GC | 65 |
| Naphthenes | % m/m | GC | 35 |
| Aromatics | mg/kg | SMS 2728 | < 5 |
| Benzene | mg/kg | GC | < 1 |
| n-Hexane | % m/m | GC | < 0.1 |

| | | | |
|---|---|---|---|
| Sulfur | mg/kg | SMS 1897 | < 0.5 |
| Flash Point | °C | IP 170 | 1 |
| Auto Ignition Temperature | °C | ASTM E659 | 310 |
| Explosion Limit: Lower | %v/v | - | 0.9 |
| Explosion Limit: Upper | %v/v | - | 6.8 |
| Electrical Conductivity @20°C | pS/m | - | < 1 |
| Dielectric Constant @20°C | - | - | 2.0 |
| Aniline Point | °C | ASTM D611 | 63 |
| Kauri-Butanol Value | - | ASTM D1133 | 33 |
| Pour Point | °C | ASTM D97 | < -50 |
| Surface Tension @20°C | mN/m | Du Nouy ring | 22 |
| Viscosity @25°C | $mm^2/s$ | ASTM D445 | 0.72 |
| Hildebrand Solubility Parameter | $(cal/cm^3)^{\wedge}½$ | - | 7.5 |
| Hydrogen Bonding Index | - | - | 0 |
| Fractional Polarity | - | - | 0 |
| Heat of Vaporization @Tboil | kJ/kg | - | 300 |
| Heat of Combustion (Net) @25°C | kJ/kg | - | 45500 |
| Specific Heat @20°C | kJ/kg/°C | - | 2.1 |
| Thermal Conductivity @20°C | W/m/°C | - | 0.13 |
| Molecular Weight | g/mol | Calculated | 110 |

(#) 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
Energy Institute (IP) : www.energyinst.org.uk
Deutsches Institut für Normung (DIN) : www.din.de

Shell Method Series (SMS) methods are issued by Shell Golabl Solutions International B.V., Shell Research and Technology Centre, Amsterdam, The Netherlands. Copies of SMS can be obtained through your local Shell Chemicals company.

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 Shell Chemicals company.

**Quality**

SBP 100/140 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.shell.com/chemicals.

**Storage and Handling**

Provided proper storage and handling precautions are taken we would expect SBP 100/140 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.shell.com/chemicals.

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