Product Information Sheet

Name: PW- 600

CAS Registry Number 64742-48-9

EINECS Number 265-150-3

Description PW-600 consists predominantly of C10- C12 paraffins and naphthenes.

Deep hydrogenation gives this solvent a very low aromatic content, negligible amount of reactive impurities and a low, sweet odour.

Product Code

Issued:

Product Category Aliphatics

Q3522 Europe

Property Unit Method Value

Density @15°C kg/l ASTM D4052 0.781

Cubic Expansion Coefficient @20°C (10^-4)/°C Calculated 10

Refractive Index @20°C - ASTM D1218 1.433

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 D86 188

Distillation, EP °C ASTM D86 209

Relative Evaporation Rate (nBuAc=1) - ASTM D3539 0.04

Relative Evaporation Rate (Ether=1) - DIN 53170 200

Antoine Constant A # kPa, °C - 6.91546

Antoine Constant B # kPa, °C - 2225.63

Antoine Constant C # kPa, °C - 257.923

Antoine Constants: Temperature range °C - +70 to +200

Vapor Pressure @0°C kPa Calculated 0.02

Vapor Pressure @20°C kPa Calculated 0.08

Saturated Vapor Concentration @20°C g/m³ Calculated 5

Paraffins % m/m GC 50

Naphthenes % m/m GC 50

Aromatics mg/kg SMS 2728 < 100

Benzene mg/kg GC < 3

Typical Properties

Sulfur mg/kg SMS 1897 < 0.5

Flash Point °C ASTM D93 66

Auto Ignition Temperature °C ASTM E659 255

Explosion Limit: Lower %v/v - 0.6

Explosion Limit: Upper %v/v - 6.0

Electrical Conductivity @20°C pS/m - < 1

Dielectric Constant @20°C - - 2.1

Aniline Point °C ASTM D611 71

Kauri-Butanol Value - ASTM D1133 31

Pour Point °C ASTM D97 < -50

Surface Tension @20°C mN/m Du Nouy ring 26

Viscosity @25°C mm²/s ASTM D445 1.6

Hildebrand Solubility Parameter (cal/cm³)^{^1}/₂ - 7.6

Hydrogen Bonding Index - - 0

Fractional Polarity - - 0

Heat of Vaporization @Tboil kJ/kg - 260

Heat of Combustion (Net) @25°C kJ/kg - 45000

Specific Heat @20°C kJ/kg/°C - 2.0

Thermal Conductivity @20°C W/m/°C - 0.14

Molecular Weight g/mol Calculated 162

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

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

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

Deutsches Institut for 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.

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.

Test Methods

ot contain detectable quantities of polycyclic aromatics, heavy metals or chlorinated compounds.

Quality

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

Hazard Information

Storage and Handling

Provided proper storage and handling precautions are taken we would expect PW-600 to be technically stable for at least 12 months. www.shell.com/chemicals..

.