

Product Information Sheet

Name : **PW- 400**

CAS Registry Number 64742-48-9

EINECS Number 265-150-3

Distributor: **CleanSystem** Athens Greece Tel;00306945088717

Description PW-400 is a deeply hydrogenated solvent that consists predominantly of C9- C11 paraffins and naphthenes. It is further characterised **by a very low aromatic content**, negligible reactive impurities and a low, sweet odour.

Product Code

Issued:

Product Category Aliphatics

Q3362 Europe

Property Unit Method Value

Density @15°C kg/l ASTM D4052 0.766

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

Refractive Index @20°C - ASTM D1218 1.425

Color Saybolt ASTM D156 +30

Bromine Index mg Br/100g ASTM D1492 < 10

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 162

Distillation, DP °C ASTM D1078 181

Relative Evaporation Rate (nBuAc=1) - ASTM D3539 0.23

Relative Evaporation Rate (Ether=1) - DIN 53170 53

Antoine Constant A # kPa, °C - 6.95710

Antoine Constant B # kPa, °C - 2077.80

Antoine Constant C # kPa, °C - 257.620

Antoine Constants: Temperature range °C - +20 to +160

Vapor Pressure @0°C kPa Calculated 0.08

Vapor Pressure @20°C kPa Calculated 0.30

Saturated Vapor Concentration @20°C g/m³ Calculated 17

Paraffins % m/m GC 55

Naphthenes % m/m GC 45

Aromatics mg/kg SMS 2728 < 100

Benzene mg/kg GC < 3

Typical Properties

Sulfur mg/kg SMS 1897 < 0.5

Flash Point °C IP 170 40

Auto Ignition Temperature °C ASTM E659 270

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 68

Kauri-Butanol Value - ASTM D1133 32

Pour Point °C ASTM D97 < -50

Surface Tension @20°C mN/m Du Nouy ring 25

Viscosity @25°C mm²/s ASTM D445 1.2

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

Hydrogen Bonding Index - - 0

Fractional Polarity - - 0

Heat of Vaporization @Tboil kJ/kg - 270

Heat of Combustion (Net) @25°C kJ/kg - 45500

Specific Heat @20°C kJ/kg/°C - 2.0

Thermal Conductivity @20°C W/m/°C - 0.13

Molecular Weight g/mol Calculated 140

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

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
For routine quality control analyses, local test methods may be applied that are different from those mentioned in this datasheet.

Test Methods

Does not contain detectable quantities of polycyclic aromatics, heavy metals or chlorinated compounds.

Quality

For detailed Hazard Information please refer to the Material Safety Data Sheet

Hazard Information

Storage and Handling

Provided proper storage and handling precautions are taken we would expect PW-450 to be technically stable for at least 12 months.