



# Pentane Blend 80/20

## TECHNICAL DATASHEET

Pentanes  
SICC Product Code: Q1117  
CAS Registry Number: mixture  
EC Number: mixture

### Description

Pentane Blend 80/20 consists of approximately 80% n-Pentane and 20% Isopentane. Pentane Blend 80/20 is a very volatile hydrocarbon solvent, low in odour and impurities.

### Typical Physical Properties

Property	Unit	Value	Method
Density @ 15°C	kg/l	0.630	ASTM D4052
Coefficient of Cubic Expansion @ 20°C	10 <sup>-4</sup>	16	calculated
Refractive Index @ 20°C	-	1.357	ASTM D1218
Colour	Saybolt	+30	ASTM D156
Copper Corrosion (1hr @ 100°C)	-	1	ASTM D130
Doctor Test	-	Negative	ASTM D4952
Non-Volatile Matter	mg/100 ml	< 1	ASTM D1353
Distillation, Initial Boiling Point	°C	34	ASTM D1078
Distillation, Dry Point	°C	36	ASTM D1078
Relative Evaporation rate (nBuAc=1)	-	12	ASTM D3539
Vapor Pressure @ 0°C	kPa	28	Calculated
Vapor Pressure @ 20°C	kPa	61	Calculated
Saturated Vapor Concentration @ 20°C	g/m <sup>3</sup>	1803	Calculated
Paraffins	%m/m	> 99	GC
Napthenes	%m/m	< 1	GC
Aromatics	mg/kg	< 5	SMS 2728



Property	Unit	Value	Method
Benzene	mg/kg	< 3	GC
Toluene	mg/kg	< 3	GC
n-Hexane	%m/m	< 0.1	GC
Sulfur	mg/kg	< 0.5	ISO 20846
Flashpoint (Abel)	°C	< -50	IP170
Lower Explosion Limit in Air	%v/v	1.3	
Upper Explosion Limit in Air	%v/v	7.8	
Auto Ignition Temperature	°C	410	ASTM E659
Electric Conductivity @ 20°C	pS/m	< 1	ASTM D4308
Dielectric Constant	-	1.8	-
Pour Point	°C	< -50	ASTM D97
Viscosity @ 25°C	mm <sup>2</sup> /s	0.35	ASTM D445
Surface Tension @ 20°C	mN/m	16	Du Nouy ring
Thermal Conductivity @ 20°C	W/m/°C	0.12	-
Hildebrand Solubility Parameter	(cal/cm <sup>3</sup> ) <sup>1/2</sup>	7.0	
Hydrogen Bonding Index	-	0	-
Fraction Polarity	-	0	-
Heat of Vaporization at T <sub>boil</sub>	kJ/kg	354	-
Heat of Combustion (Net) @ 25°C	kJ/kg	46000	-
Specific Heat @ 20°C	kJ/kg/°C	2.4	-
Molecular Weight	g/mol	72	Calculated

## Test Methods

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

- American Society for Testing and Materials (ASTM)
- International Organization for Standardization (ISO)
- Deutsches Institut für Normung (DIN)

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.



**Shell Chemicals**

## Quality

Pentane Blend 80/20 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.

Access Safety Data Sheets here: [Safety Data Sheets](#)

## Storage and Handling

Provided proper storage and handling precautions are taken we would expect Pentane Blend 80/20 to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Safety Data Sheet

## Shell Warranties

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