

# MOL Group CHEMICALS

## BENZENE

### About the product

Benzene is a colourless and highly flammable liquid with a sweet smell and relatively high melting point.

### Applications

Benzene is an important chemical feedstock in the production of numerous intermediate products, such as polymer plastics, synthetic fibers, detergents and solvents. In fact, products made from benzene are widely-used in everyday life.

The most important benzene derivatives are as follows:

Ethylbenzene, styrene (vinyl benzene), cumene (isopropyl-benzene), phenol, cyclohexane, adipinic acid, nitrobenzene, maleic anhydride, alkyl benzenes

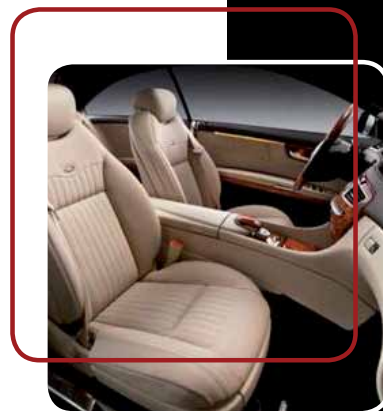
### Product quality requirements

Benzene is produced by MOL Group in Danube Refinery (Százhalombatta, Hungary) and in Slovnaft Refinery (Bratislava, Slovakia). Their base quality properties are specified in the following tables:

### MOL Refinery

#### Product Quality Specification

Analysis		Method	Requirements
Density at 15 °C	g/cm <sup>3</sup>	MSZ EN ISO 12185	0.8820 - 0.8860
Appearance	-	Visual	Clear, colorless liquid
Color (HAZEN)	-	ISO 6271	max. 10
Benzene content	%(m/m)	MSZ 22320	min. 99.9000
Toluene	mg/kg	MSZ 22320	max. 50
Total non aromatics	%(m/m)	MSZ 22320	max. 0.10
Methyl-cyclo-Hexane (ppm)	mg/kg	MSZ 22320	max. 200
Sulfur Content	mg/kg	MSZ 12697	max. 1
Hydrogen Sulfide	-	ASTM D 853	Negative
Sulfur Dioxide	-	ASTM D 853	free
Tiophene content	mg/kg	ASTM D 1685	max. 1
Copper Strip	-	MSZ EN ISO 2160	Negative
Acid wash color	g/dm <sup>3</sup>	ASTM D 848	max. 1
Freezing point	C_fok	ASTM D 852	min. 5.35
Acidity	-	ASTM D 847	free
Chloride content ppm	mg/kg	ASTM D 4929	max. 1
Water	-	Visual	free
Total Nitrogen	mg/kg	MSZ 11794	max. 1.0



## Slovnaft Refinery

Analysis		Method	Requirements
Appearance at 20°C	—	visual	Pass*
Benzene content	% (m/m)	ASTMD4492	min. 99.9
n-Heptane content	% (m/m)	ASTMD4492	max. 0.01
Toluene and methylcyklohexane content	% (m/m)	ASTMD4492	max. 0.05
Density at 20 °C	kg/m3	STN EN ISO 12185	876 - 880
Freezing point	°C	STN ISO 5278	min. 5.4
Sulphur content	mg/kg	STN EN ISO 20846	max. 1
Bromine index	mg Br/100 g	ASTM D 1492	max. 10
Water content	mg/kg	ASTM E 203	max. 500
Nitrogen content	mg/kg	ASTM D 4629	max. 1
Chlorides content	mg/kg	ASTM D4929/D5808	max. 3

\* Clear, bright and visually free from solid matter and undissolved water

**Distribution:** road and railtank cars

For further information please contact Your MOL or Slovnaft sales person or contact us

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**MOL**