



AdBlue® technical specifications

AdBlue® is an aqueous 32.5% urea solution with a specified concentration of constituents as per ISO 22241 specifications:

<i>Material</i>	<i>Unit</i>	<i>Specification</i>
Urea Concentration	wt%	min. 31.8 / max 33.2
Density at 20°C	kg/m ³	min. 1087.0 / max.1093.0
Refractive Index at 20°C		min. 1.3814 / max. 1.3843
Alkalinity as NH ₃	wt%	max. 0.2
Biuret	wt%	max. 0.3
Aldehyde	mg/kg	max. 5
Insoluble	mg/kg	max. 20
Phosphate (PO ₄)	mg/kg	max. 0.5
Calcium	mg/kg	max. 0.5
Iron	mg/kg	max. 0.5
Copper	mg/kg	max. 0.2
Zinc	mg/kg	max. 0.2
Chromium	mg/kg	max. 0.2
Nickel	mg/kg	max. 0.2
Magnesium	mg/kg	max. 0.5
Sodium	mg/kg	max. 0.5
Potassium	mg/kg	max. 0.5
Aluminium	mg/kg	max. 0.5

The quality requirements for AdBlue® are defined in ISO 22241. The specification laid down in this standard has to be maintained from production throughout the entire supply chain to the end-user.

AdBlue® solution has the following properties:

- Boiling point 104°C
- Crystallization point -11.5°C
- Vapour pressure, 20°C 23 mbar
- Viscosity, 25°C 1.4 mPas
- Specific heat 3.40 kJ/kgK
- Latent heat of vaporization 2258 kJ/kg
- Density 1089 kg/m³
- Thermal conductivity 0.57 W/mK
- Surface tension 0.065mN/m min