

With AdBlue®, made by “CrossChem” group, we aim to help our customers reduce emissions and comply with standards, contributing to a much cleaner environment. “CrossChem” is a worldwide license holder and special member of the VDA. AdBlue® is a registered trademark of the German Association of the Automotive Industry (VDA Verband der Automobilindustrie e.V.). “CrossChem” manufacture the highest purity of AdBlue® with highly integrated production process, quality control and extensive knowledge.

What is AdBlue®?

AdBlue® is fully licensed and registered aqueous urea solution. AdBlue® is a high purity aqueous urea solution composed of 32.5% urea and 67.5% demineralized water and has been made in accordance with the ISO 22241 standard. AdBlue® is used in any diesel powered vehicle (Passenger car; Trucks; Buses) or truck equipped with selective catalytic reduction (SCR) system.

AdBlue® is classified as a non-hazardous product. AdBlue® is non-flammable, non-explosive product and safe for the environment. It is biodegradable. AdBlue® is a premium class product that conforms to the ISO 22241-1:2019 standard and ensures a smooth-running SCR system in any vehicle.

What is SCR technology? How does AdBlue® work?

SCR technology is designed to treat exhaust gases. An SCR catalyst uses AdBlue® to convert nitrogen oxide (NO_x) from exhaust gases into water vapour and nitrogen (N₂). AdBlue® is directly injected into the flow of exhaust gas where it serves as reducing agent. Thereby, ammonia is released that reacts with the nitric oxides on the catalyst to form elementary nitrogen and water, which are natural air components and which we normally breathe. AdBlue® in combination with SCR technology helps to significantly reduce harmful nitrogen oxide (NO_x) emissions by up to 85%.

The Material Safety Data Sheet (“MSDS”) for this product contains important environmental, health and safety information regarding AdBlue®, including information concerning the handling and storage of this product. Copies of the MSDS for this product can be obtained by contacting your “CrossChem” representative. **Important disclaimer!** Product characteristics, specification values may vary depending on the manufacturing origin and batch. Although the information contained herein is provided based on current knowledge and laboratory tests and is considered to be reliable and accurate as of the date issued, but data is given only as a reference. Some grab samples may fall outside of those specifications. “CrossChem” makes no guarantee, representation or warranty of such information’s accuracy, reliability, completeness or timeliness or the suitability of the product for any purpose. It is the user’s responsibility to determine the completeness of such information and the suitability of the product for the user’s own particular use or purposes. “CrossChem” liability for damages or losses shall be limited to replacement of the product or refund of the purchase price, at “CrossChem” option. In no event shall “CrossChem” liable for any special or consequential damages.

The consumption of AdBlue® is an average of 4% to 6% of diesel consumption. AdBlue® by “CrossChem” can be used to bring vehicles into line with the European Union’s EURO 4, EURO 5 and EURO 6 emission standards. It meets the standards of vehicle manufacturers, which have designed more advanced exhaust systems to comply with the requirements.

Precautions:

AdBlue® can corrode certain metals, in case of contact, rinse with water. Never mix AdBlue® with water or other substances. Be careful not to put AdBlue® in the diesel tank or diesel in the AdBlue® tank. Any such mixture poses substantial risks that can cause serious damage to the SCR system. Solidified AdBlue® below -11°C has an approximately 7 % larger volume than the liquid and, may cause burst of fully filled containers.

Available sizes:

Bulk; 1000 L IBC containers; 650 L IBC containers; 210 L Drums; 20 L cans; 10 L cans; 4 L cans and 1.85 L cans.



Storage:

To maintain the quality of AdBlue® it is recommended that to store it from -5°C to +25°C and away from direct sunlight and in containers of suitable materials. Do not store or allow product to come into contact with mild steel, iron, zinc coated steels, aluminium, brass, copper or alloys. Highly alloyed steels, Titan, HDPE, PP and Viton are suitable materials for contact with AdBlue®. Shelf Life of 12 months if stored below +25°C from the date of manufacture

Physical properties:

Property	Value
Color, appearance	Clear, colourless liquid.
Odour	No odour, slight ammonia odour
Freezing / Melting point	≈ -11°C
Specific heat	≈ 3.40 kJ/kg·K (25°C)
Viscosity	1.4 mPA*s (25°C)
Surface tension	65 mN/m
Thermal conductivity	0.570 W/m·K (25°C)
Solubility in water	Unlimited
Total nitrogen content	15.0 W%

Chemical composition:

Parameter	Unit	Result
Urea content	% [m/m]	31.8 – 33.2
Density at 20°C	kg/m ³	1087.0 - 1093.0
Refractive index at 20°C	-	1.3814 – 1.3843
Alkalinity as NH ₃	% [m/m]	< 0.2
Biuret	% [m/m]	0.3
Aldehydes	mg/kg	< 5
Insoluble matter	mg/kg	< 20
Phosphates (PO ₄)	mg/kg	< 0.5
Calcium (Ca)	mg/kg	< 0.5
Iron (Fe)	mg/kg	< 0.5
Copper (Cu)	mg/kg	< 0.2
Zinc (Zn)	mg/kg	< 0.2
Chromium (Cr)	mg/kg	< 0.2
Nickel (Ni)	mg/kg	< 0.2
Aluminium (Al)	mg/kg	< 0.5
Magnesium (Mg)	mg/kg	< 0.5
Sodium (Na)	mg/kg	< 0.5
Potassium (K)	mg/kg	< 0.5

To meet the needs of our customers, “CrossChem” offers a wide range of delivery and packing options. To find out more, you can contact us.