# **AdBlue®**



#### PRODUCT DESCRIPTION

AdBlue® is special treating agent based on water solution with high level (32.5%) of carbamide/urea, designed for modern diesel vehicles, equipped with selective catalytic reduction systems (SCR). The use of carbamide solution allows to decrease harmful emission of nitrogen oxides to the level of Euro 5 and Euro 6 requirements and to significantly decrease fuel consumption of vehicles. Due to the injection of AdBlue® fluid in the flow of exhaust fumes a chemical interaction occurs. During catalytic interaction harmful nitrogen oxides (NOx) react to form harmless water and nitrogen, thus meeting stringent requirements of modern environmental standards. The treating agent is harmless for human and environment and is 100% biodegradable.

## **APPLICATION**

 Diesel exhaust fluid is engineered for modern diesel vehicles, equipped with selective catalytic reduction systems (SCR) in order to treat exhaust gases and provide compliance to Euro 5 and Euro 6 environmental standards in emission of nitrogen oxides (NOx).

## MEETS SPECIFICATIONS AND REQUIREMENTS OF:

- DIN 70070
- ISO 22241-1 (official License)
- BMW Group 83 19 0 441 139
- MB A 000 583 0107
- VW/Audi G 052 910 A2

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Before using this product make sure, it is consistent with OEM's recommendations for the equipment operating conditions and customer's maintenance practices.

#### NOTE!

The fluid freezes at -11.5°C. After deicing the product can be used again, as freezing does not affect performance characteristics of product.

The consumption of AdBlue® is up to 4% of diesel fuel consumption (Euro 4 compliant engines) or up to 6% (Euro 5 compliant engines). It is approximately 1,5-2 liters per 100 km.

## TYPICAL TEST DATA

CHARACTERISTICS	UNITS	VALUES	ASTM
Density at 20 °C	kg /m³	1091.0	GOST 18995-1
Weight percent of carbamide	%	32.2	ISO 22241-2 (App. C)
Refractive index at 20 °C	°C	1.3825	ISO 22241-2 (App. C)
Alkalinity (at free ammonia MH <sub>3</sub> )	%	0,005	ISO 22241-2 (App. D)
Weight concentration of insoluble substances	mg/kg	Less than 20.0	ISO 22241-2 (App. G)
Weight concentration of phosphates (at PO <sub>4</sub> )	mg/kg	Less than 0.5	ISO 22241-2 (App. G)
Weight percent of biuret	%	Less than 0.3	GOST 6691 (P. 3.12)

# STORAGE AND HANDLING GUIDELINES

- Store product in seal tight containers in cool, well ventilated place. Protect product from direct sunlight and moisture.
- To prevent premature decomposition of product or water evaporation (if stored in open packing) avoid long storage or transportation of product at temperatures above 25 °C.
- Note: long storage of product at temperatures above 25 °C decreases its shelf life (see Table 1). Short term increase of storage temperature does not affect shelf life of product.
- To avoid freezing do not store AdBlue<sup>®</sup> at temperatures below -5 °C. Freezing point of product is -11 °C.
- When frozen, AdBlue® has volume, approximately 7% greater, than in liquid state. That is why freezing of product in fully filled container may cause rupture of packing. After de-icing AdBlue® at temperature not more than 30 °C the product does not impair its quality and can be used as intended.
- To prevent excessive increase of temperature do not expose AdBlue® to direct sunlight.
- This treating agent may cause corrosion of some metals. It is not recommended to store product in the vicinity of parts, made of aluminium, bronze, cast iron and low-alloyed steel. The product should be kept and transported in certified tight packing.
- Keep off of reach of children and animals.
- It is highly recommended to store drums indoors on pallets and racks.
- If stored outdoors drums should be placed under shed sidewise or be covered to avoid accumulation of moisture.

# HEALTH. SAFETY AND ENVIRONMENT PROTECTION

Information on health, safety and environment protection is described in the product Safety Data Sheet (SDS). The SDS file contains details on potential hazards, precautions and first aid measures, as well as information on environmental impact and disposal of used products.

Table 1. AdBlue® shelf life depending on storage temperature

Storage temperature,	Shelf life,	
°C	months	
<10	36	
<25	18	
<30	12	
<35	6	
>35	_ *	

\*Significant decrease of shelf life! Be sure to check each batch of product.

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