

CLEARNOX

CLEARNOX® is a ready-to-use solution comprising 32.5% high purity urea that is **recommended for use in Selective Catalytic Reduction (SCR) systems** to reduce nitrogen oxide (NOx) emissions.

USES

- **CLEARNOX®** is used in the exhaust gas aftertreatment process in vehicles equipped with a Selective Catalytic Reduction (SCR) system (i.e. from Euro IV vehicles). This urea-based solution helps reduce the nitrogen oxide (NOx) emissions produced by diesel engines;
- **CLEARNOX®** converts NOx to nitrogen (N₂) and water vapor (H₂O), two non-polluting molecules already present in the atmosphere;
- **CLEARNOX®** can be used in all SCR-equipped vehicles;
- **CLEARNOX®** is especially recommended for vehicles that make frequent stops or drive with low loads;
- **CLEARNOX®** is a preventive solution that keeps crystals from forming in the SCR system. Using it continuously keeps SCR systems working efficiently;
- **CLEARNOX® is not a fuel additive. It should not be blended or added into the fuel tank;**
- **CLEARNOX® consumption depends on the engine design and the operating cycle, but generally varies between 3 and 8% of diesel consumption.**

SPECIFICATIONS

- **CLEARNOX®** complies with the physical and chemical characteristics of the international ISO 22241-1 and DIN 70070 standards, as well as with European Chemical Industry Council (CEFIC) regulations, but does not meet the definition in ISO 22241-1 section 3.1 due to the presence of additives.

BENEFITS

- **Inhibits the formation of deposits** in the SCR system, thereby reducing the risk of the system plugging up;
- **Improves product spray;**
- **Ensures optimal vehicle operation;**
- **Is miscible with AdBlue®.** However, CLEARNOX® loses its specific properties if diluted.

CARACTERISTICS

CLEARNOX®		Min.	Max.
Urea content	% (m/m)	31.8	33.2
Color		Clear and colorless	
Density at 20°C	g/cm ³	1.087	1.093
pH		9	10
Refractive index		1.3814	1.3843
Ammonia (NH ₃) content	% (m/m)		0.2
Biuret	% (m/m)		0.3
Aldehydes	mg/kg		5
Insoluble matter	mg/kg		20
Phosphate content	mg/kg		0.5
Calcium content	mg/kg		0.5
Iron content	mg/kg		0.5
Copper content	mg/kg		0.2
Zinc content	mg/kg		0.2
Chrome content	mg/kg		0.2
Nickel content	mg/kg		0.2
Aluminum content	mg/kg		0.5
Magnesium content	mg/kg		0.5
Sodium content	mg/kg		0.5
Potassium content	mg/kg		0.5
Crystallization temperature	°C		-11
Dissolution temperature	°C		-6
Decomposition temperature	°C		> 60°

STORAGE

- **CLEARNOX® should be stored at between -5°C and 30°C** to avoid crystallization or hydrolysis of the product;
- Storage tanks, containers, drums, cans and other materials that come into contact with the product should be made of **stainless steel or plastic in accordance with ISO 22241**;
- Materials such as copper, copper alloys or galvanized metals are not advised;
- The product can be stored at the recommended temperature for 12 months in its original, unopened packaging, away from direct sunlight;
- **CLEARNOX®** is classified as non-hazardous with regard to the regulation on hazardous substances.