ERC Produktinformation

carbamin 5722

NO_x- Reduction Agent

The Product

carbamin 5722 is a liquid, aqueous additive designed to reduce NO_x emissions according to the Selective Non Catalytic Reduction procedure in the flue gas of boilers and incinerators.

carbamin 5722 is injected into the flue gas in a temperature area of (850 – 1080) ℃ by an electronically controlled dosing system. The quantity will be determined in accordance to the load of the boiler and / or the NO_x concentration in the flue gas.

Way of Acting

After injection in the mentioned temperature area carbamin 5722 splits in a homogenous gas phase reaction the nitrogen oxides into nitrogen and water vapour, as described in the following over all reaction:

carbamin 5722 + NO + O_2 → N_2 + H_2O + CO_2

The main reactive material in carbamin 5722 is urea, in aqueous solution of 40 %. The urea solution is supplemented by additives in order to avoid side reactions, such as NH_3- slip or formation of undesired ammonium salts (ammonium chloride NH_4Cl, or ammonium-Hydrogen sulphate NH_4HSO_4). Subsequent problems like deposits, corrosion and contamination of fly ash by ammonium salts will be minimised too.

Furthermore carbamin 5722 contains constituents which enable trouble free operation of the dosing system even if hard water is used as dilution water. No clogging of the injection nozzles is to be expected. The proper NO_x reduction will be possible even in a broader load range of the boiler or incinerator.

Application Field

Boilers an incinerators with high NO_x emission level.

Dosing Concentration

ERC supplies carbamin 5722 in a concentration of 40 %, which is diluted on site with town water by means of the dosing system. The application concentration will be established always according to the height of the baseline NO_x emission, the required NO_x reduction rate and the flue gas flow.

Application

carbamin 5722 is applied by means of an electronically controlled dosing system. A specially programmed sequence controller avoids dosage of carbamin 5722 in excess. Thus only the required quantities to fulfil the NO_x emission limits will be used.

Compatibility

carbamin 5722 reacts ash free and has no impact upon the particulate emission.

Supply Modality

1000- Litre- recyclable containers or tank trucks.

Storage

Discharge always at ambient temperature. Minimum storage temperature is + 5 ℃.

Safety of Labour

carbamin 5722 contains no substances subject to any special mentioning according to laws and regulations for operation materials.

Avoid direct contact to eyes and skin. In case of occurrence flush with plenty of water.

Environmental Protection

carbamin 5722 has an environment protecting purpose and creates no toxic combustion products.

carbamin 5722 MUST NOT get into drain water!

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