

Technical Bulletin

Exhaust Clean

Conditioner for Exhaust Scrubber Systems

Product Description:

EXHAUST CLEAN is a newly developed high activity, low foam additive specifically formulated for use in the exhaust scrubber tanks of locomotives and personnel carriers used in underground mining operations. EXHAUST CLEAN emulsifies and disperses the carbon and oily residues which are removed from the exhaust gases in this scrubber tank thus facilitating cleaning and maintenance of the exhaust scrubber system.

EXHAUST CLEAN is a clear yellow coloured water based liquid containing a blend of emulsifying and dispersing agents and a hard water sequestrant.

As a non solvent based product, EXHAUST CLEAN has a flash point greater than 66° and thus is classified as no flammable.

- EXHAUST CLEAN effectively emulsifies and disperses the oily combustion residues removed from the exhaust gases.
- Is non toxic.
- Is non flammable.
- Is approved for use in underground mines.
- Unlike powdered products, completely dissolves in the water and thus does not cause blocking of filters.
- Is none foaming.
- Is non corrosive to all metals.
- Is economical in use.

Application:

Locomotives and personnel carriers used in underground mining operations are fitted with a system for the removal or scrubbing of toxic fumes, combustion residues and unburnt distillate from the exhaust gases. This system may vary slightly from one brand of locomotive or personnel carrier to another, but basically it consists of passing the exhaust gases through a series of baffles wherein water is used to scrub or clean these gases. The water is usually fed to the scrubber tank from an auxiliary header tank. Quite often this same water is interconnected with the engine cooling system.

Regular discharging of the water used in the scrubber system is required for its efficient performance.

EXHAUST CLEAN greatly facilitates this discharging and cleaning operation and thus reduces down time for the locomotives or personnel carriers.

EXHAUST CLEAN should be added to the water in the header tank at 1/4% to 1% i.e. between 1/4 to 1 litre of EXHAUST CLEAN for every 100 litres of water. For systems in which EXHAUST CLEAN has not been used and which may have a build up of oily and grease like residues, a level of 1/2 to 1 litre of EXHAUST CLEAN is recommended per 100 litres of water.

For systems which are regularly maintained with EXHAUST CLEAN, a level of 1/4 litre to 1/2 litre of EXHAUST CLEAN per 100 litres of water is recommended.

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Solutions, Chemistry, Service

Case Study:

Jason Crosara is the integrated supply Manager for Auslec, providing supply solutions for Donaldson Coal, he relates:

'For the past eight months we have been using the Castle Chemicals brand of Exhaust Clean on both the Donaldson Coal Mine sites at Abel & Tasman. The Castle Chemicals Exhaust Clean has been of exceptional quality with no foaming issues to date.

Before we had the opportunity to change brands of exhaust clean on site to the Castle Chemical brand, a rigorous testing procedures had taken place by engineers on site before sign off was granted to changeover Castle Chemicals have also provided a reliable dispensing system for the sites that are fully maintained on a regular basis. All of this plus a significant cost savings has been banked compared to the previous brand used.

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SHELF LIFE: As a quality assured manufacturer, Castle Chemicals has a stringent Quality assurance programme. As part of this regime, the label on this product shows a batch number and date of manufacture. This product has a shelf life of 24 months from the label printed date of manufacture. This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Castle Chemicals assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of material.

Page 2 of 2

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