



material safety data sheet :

SOOT CLEANER LIQUID™

DESCRIPTION :

SOOT CLEANER LIQUID is a water-based, magnesium-containing liquid formulated to act as a combustion catalyst in order to easily remove soot and ash deposits from surfaces where accumulation has occurred during fuel combustion. It is applicable to all types of boiler and diesel engine exhaust systems. It is a low viscosity liquid, making handling and feeding easy. **SOOT CLEANER LIQUID** works to control fireside slagging and fouling by decreasing the ignition point of the soot, making deposits easier to remove during normal soot blowing and out-of-service cleaning. It is also effective in controlling cold-end corrosion and acid smut emissions.

ADVANTAGES AND CHARACTERISTICS :

- Non-hazardous liquid which reduces slagging and fouling.
- Effective in controlling cold-end corrosion and acid smut emissions.
- Reduces high-temperature corrosion as well as cold-end corrosion and fouling.
- Minimizes costs associated with maintenance and downtime.
- Induces fuel efficiency thus contributing to fuel saving.

PHYSICAL PROPERTIES :

SOOT CLEANER LIQUID is a water-based, magnesium containing liquid, formulated with a dispersant to enhance product dispersion in fuel oil. As a water-based product, it has no flash point issues and is not sensitive to moisture ingress.

Appearance / Color : Yellow to amber liquid

Odor : Mild

Flash Point : >100°C

Solubility in Water : Completely soluble

Density : 1.34 gr/cm³ at 20°C

pH (conc. product) : 5.0

APPLICATION AND USE :

Dosing Procedure The quantity of **SOOT CLEANER LIQUID** to be used can depend on many factors such as the type of problem and its severity; we must also take into consideration the design and operating characteristics of the boiler. The suggested quantity of **SOOT CLEANER LIQUID** is 1 litre per 4–6 m³ of fuel. Note that the above quantity may be altered, depending on the type of system to be treated, based on particular variations in the quality of the fuel and/ or the manufacturer's technical specifications.

Cleaning Procedure **SOOT CLEANER LIQUID** is applicable to many systems such as diesel exhaust gas economizers, fire tube boilers, main boilers, etc. In the case of diesel exhaust systems, the product is applied upstream, of the area being treated into the exhaust gas system. In the case of boilers, the product is applied from a suitable port point of the system, preferably with an injector, making sure that the liquid is spread right through towards the backside of the combustion chamber.

KEMOTOR: MARINE CHEMICALS & CLEANING & MAINTENANCE



material safety data sheet :

SOOT CLEANER LIQUID™

LITERATURE – TECHNOLOGY:

Combustion-related problems in boilers include slagging, fouling, high temperature corrosion and cold-end corrosion of heat transfer surfaces and other boiler components. Deposition is related to the presence of impurities in the fuels being burned while combined with combustion practices. High temperature deposition will occur when molten ash derived from fuel impurities, comes into contact with the metal surfaces of the boiler and solidifies. When this “slag” contacts a metal surface, additional ash particles become trapped within the sticky molten mass, this results in fouling and uncontrolled heavy slagging. Once deposits have formed, corrosion can result beneath. Soot blowing may not be able to remove these tenacious deposits. Continuous build up, will result in lost efficiency and reduced throughput of the boiler. High temperature corrosion causes metal loss and eventual tube failure. SOOT CLEANER LIQUID combines with various ash constituents to decrease the ignition point and weaken their deposit structure. This permits the ash to pass through the boiler as a solid and increases friability of any deposits, which do form, making deposit removal easier by means of soot blowing or off-line cleaning. Sulfur trioxide (SO₃) is formed from the combustion of sulfur contained in fuels. It combines with water vapor in the flue gas to form Sulfuric Acid. The acid corrodes metal surfaces that are below.

SAFETY AND HANDLING:

HANDLING	Handle with care. Store in a dry, cool and well ventilated environment.
SAFETY	IMMEDIATE ACTIONS.
Eye Contact	Avoid Eye contact. Otherwise, flush with plenty of water for a few minutes. Seek medical attention.
Skin Contact	Avoid Skin contact. Otherwise, wash contaminated area thoroughly with water. Seek medical attention.
Inhalation	Do not breathe gas/vapors. Otherwise, seek fresh air source at once. Seek medical attention. In case of insufficient ventilation, wear suitable respiratory equipment.
If Swallowed	Avoid ingestion. Otherwise, consume a considerable quantity of water. Do not induce vomiting. Seek medical attention.
GENERAL INSTRUCTIONS	Avoid spillage, splashing and mishandling. Precautionary measures for body protection are strongly recommended before use

Read the Material Safety Data Sheet before using this product.

For detailed information on safety and health, please refer to Material Safety Data Sheet and/or Product Label.

KEMOTOR: MARINE CHEMICALS & CLEANING & MAINTENANCE