UNISERVICE®

COLD WASH

Medium-Heavy Duty Solvent Based Cleaner for Mineral Oil and Grease

Technical Information

Physical Data

Appearance:Clear amberApparent Specific Gravity:0.85 at 20°CFlash Point:More than 70pH Value (10%):13 at 25°CCorrosive Action:Metals and C

Clear amber liquid 0.85 at 20°C More than 70°C (158°F) 13 at 25°C Metals and Coatings: None Rubber: Slight swelling

Description

Emulsifying cleaning agent designed for the removal of medium to heavy mineral oils and fats through spraying and brushing. It is based on aliphatic hydrocarbons, non-ionic and anionic surface-active agents. This product is the most versatile within the series of emulsifying cleaning agents and is safe for use on common metals, epoxy, and zinc silicate coatings.

Applications

Cooling Systems: In cooling systems, besides the usual lime deposits, you often find traces of mineral oils. These oil and fat deposits hinder the effective removal of hardness deposits when using acid cleaners (e.g., SAFE DESCALER). In such cases, it is recommended to use an emulsifying cleaner before acid cleaning to eliminate these deposits. Uniservice COLD WASH is ideal for these situations. **Spraying:** COLD WASH can be sprayed undiluted onto the components to be cleaned.

Tanks: COLD WASH is suitable for removing most mineral oils and fats in cargo or storage tanks (see instructions below).

Directions of Use

Cleaning of Cooling Systems

- Fill the cooling system with an emulsion of COLD WASH and water. Depending on the degree of contamination, a 100-liter cleaning liquid should contain 5-10 liters of COLD WASH.
- 2. Allow this emulsion to circulate for 12-24 hours at a maximum temperature of 60°C.
- 3. After this operation, drain the cleaning liquid and rinse the system thoroughly with water until the outlet water remains clear.
- 4. Add cooling water treatment (e.g., UNISERVICE N.C.L.T.) into the system.

Spray Method

- 1. Spray the objects to be cleaned until they are thoroughly dampened with undiluted COLD WASH.
- 2. Let the product react for 20-60 minutes, then rinse the objects thoroughly with water.

Note: Objects subject to corrosion should not be rinsed with water. In this case, use LECTROSOLVENT DRY.







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Cleaning of Cargo and Storage Tanks

Pre-wash

Before cleaning with COLD WASH, it is recommended to prewash tanks with hot water at approximately 50°C, except for crude oil, drying, and semi-drying oils, where a prewash with cold water should be applied.

Direct Injection Method for Cargo Tanks

Inject undiluted COLD WASH into the pressure side of the automatic tank cleaning system line on deck at a predetermined rate using an air-operated drum (barrel) pump. Usually, an injection rate of 0.1-0.2 liters of COLD WASH per 100 liters of tank wash water is sufficient. Cleaning time is 2-6 hours. Subsequently, rinse with water.

Tank Clearing Procedure from DPP to CPP/Gas Free

- Butterworth for 2-3 hours with seawater close to a maximum temperature of 50°C.
- Butterworth for 2 hours with seawater close to 60° to 70°C the second time.
- 3. Create a 5% mixture of COLD WASH in a slop tank, keep the water mixture temperature around 80°C, and use this water for recirculation inside the cargo tanks. Each tank should be recirculated for about 2 hours. You may need to change or create a new solution when the water inside the slop tank becomes very black.
- 4. Butterworth for 1-2 hours with hot (80°C) seawater.
- 5. Check the tank for sludge. Whenever sludge is present, you may need to vent and gas-free and then manually de-muck the cargo tank before giving another 1 hour of hot seawater wash.
- 6. Rinse with fresh water for 30 minutes at ambient temperature.
- 7. Vent, mop, dry, and de-muck as required.

Hand Spraying Method

Spray undiluted COLD WASH on bulkhead, frames, stringers, longitudinals, etc., using an air-operated drum pump connected with a delivery hose and a hand spray gun. After a predetermined reaction time, tanks should be rinsed with water using the automatic tank washing machines. For spot cleaning only, use a hand-held hose for rinsing, for instance, a fire hose with a nozzle. The Hand Spraying Method is the most economical system in terms of chemical consumption but requires tanks to be gas-free, enabling personnel to enter tanks. However, the Hand Spraying Method has a practical time limitation depending on tank sizes, i.e., the total tank surface to be sprayed.

At Sea Cleaning Method (for Double Bottom Tanks)

Time, temperature, and agitation of the chemical solution are essential factors for successfully cleaning Double Bottom Tanks.

- Heat the tank to a higher than normal temperature, pump out as much fuel as possible, and trim the vessel to ensure complete stripping.
- 2. Close all valves on the engine room manifold.
- 3. Introduce the first dose of COLD WASH through the sounding pipe, in accordance with the dosage table stated below, and fill the tank to 25% of its capacity with seawater. It is advised not to use the ballast lines for filling the tanks, as they may contain fuel oil, making the cleaning more difficult.
- 4. Heat the cleaning solution to a minimum of 60°C and maintain the temperature for 48 hours. If heating coils are not available, live steam may be used for heating the solution and maintaining the temperature.
- Empty the tanks completely, fill to 50% capacity, and empty again. For single-stage cleaning, ignore the previous steps.
- Add the second dose of COLD WASH and fill the tank with seawater to 50% of its capacity, continue heating and maintain this level for 48 hours.
- 7. Add further seawater to fill the tank to 75% capacity, continue heating and maintain for another 48 hours.
- Empty the tanks and pressure rinse with clean water through sounding pipes for 1-1 hour under continuous stripping. Pressure should be kept as high as safety permits.
- When rinsing is completed, stop the discharge (stripping) pump and fill the tank until clear water runs from the sounding pipes on the deck.
- Stop the water supply and empty (strip) the tank. Trim the vessel to ensure complete stripping.

Note: If tanks are not severely contaminated and/or the fuel oil viscosity is lower than 180 cSt at 50°C, the cleaning process should be completed in one stage using steps 5-10 only.

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Health Safety and Environment (HSE)

Uniservice Unisafe SrI have carefully developed their products to minimize the safety risks and environmental impact of using their products. However, Uniservice advises that, prior to using its products, users should read in detail the accompanying Safety Data Sheet and ensure that its products are applied within the required HSE regulations of the country in which the user operates. Best practice and safety requirements should be followed which will likely include method statements and risk assessments, together with any specific requirements of the user's own company HSE requirements.

Important Notice

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, this information is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you do a test to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth, or that the products, designs, data or information may be used without infringing the intellectual property rights of others. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the descriptions, designs, data and information furnished by Uniservice Unisafe Srl hereunder are given gratis, and Uniservice Unisafe Srl assumes no obligation or liability for the description, designs, data and information given or results obtained, all such being given and accepted at your risk. Product images are for reference purposes only.

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