

# UniClean America

## FEATURES AND BENEFITS

- **Effective Cleaning:** Removes oily contaminants and airborne deposits from air coolers and turbochargers, enhancing engine efficiency.
- **Cost-Effective:** Reduces maintenance costs and downtime by enabling in-service cleaning.
- **Safe and Efficient:** Maintains optimal operation of air coolers and turbochargers without harming the engine or the air cooling system.
- **Easy to Use:** Can be used through various cleaning methods, making it adaptable to different maintenance routines.

## UCA AIR COOLER CLEANER

### PRODUCT DESCRIPTION:

Discover the power of UniClean America AIR COOLER CLEANER, a cutting-edge solution designed to revolutionize the maintenance of diesel engine air coolers. This highly effective cleaner blends organic solvents, halogenated hydrocarbons, emulsifiers, and dispersing agents into a powerful formula that ensures your air coolers and turbochargers remain impeccably clean. Whether your equipment is in service or dismantled, UCA AIR COOLER CLEANER is specifically formulated to remove contaminants, ensuring optimal engine efficiency and performance.

### APPLICATIONS:

UCA AIR COOLER CLEANER is versatile and can be used in multiple cleaning methods:

- **In-Service Cleaning:** Inject a 33-43% solution of the cleaner upstream of the air cooler. For in-service cleaning, use a pressure pump and hand lance through the air trunk access door. Apply 3.5-5 liters of the solution per cooler every 24 hours or adjust based on engine conditions.
- **Dismantled Cleaning:** Clean dismantled air coolers by soaking them in a tank with the cleaner or by brushing or hand spraying.
- **Turbochargers:** Both the air and exhaust sides of turbochargers can be cleaned by soaking, brushing, or hand spraying the cleaner.

### CLEANING METHODS:

**Injection Method:** Inject a 33-43% solution using the dosing pot connected to the turbocharger. Control the quantity to prevent overdosing. Perform a fresh water rinse after cleaning.

**Immersion Method:** Soak dismantled parts in undiluted cleaner, agitate with compressed air, and rinse with high-pressure water.

**Circulation Method:** Circulate undiluted cleaner through the unit, followed by a fresh water rinse.

### DOSAGE AND MONITORING:

- For in-service cleaning, use 5 liters of a 33% solution per square meter of the air cooler.
- Adjust the dosage based on the engine's performance and the condition of the air coolers.



EXCELLENT QUALITY  
ENVIRONMENTAL ECOFRIENDLY

# UniClean America

## CONTROL LIMITS RECOMENDATIONS:

To determine the necessary amount of cleaning solution for an air cooler, measure or calculate the cross-sectional area of the cooler. Use 3 liters of cleaning solution per square meter. Refer to the table below for specific engine horsepower requirements:

- **Engine HP 6,000 to 12,000:** Requires 4 liters of Air Cooler Cleaner solution.
- **Engine HP 12,000 to 24,000:** Requires 6 liters of Air Cooler Cleaner solution.
- **Engine HP 24,000 or more:** Requires 8 liters of Air Cooler Cleaner solution.

## PHYSICAL PROPERTIES:

|                   |             |
|-------------------|-------------|
| Appearance:       | Clear       |
| Relative Density: | 0.88 – 0.98 |
| Form:             | Liquid      |
| Flash Point:      | > 65oC      |

## EXHAUST SIDE CLEANING:

- Reduce the engine's maximum RPM and inject a 43% solution of the cleaner into the exhaust system before the protective grids at the turbine inlet. Perform this cleaning weekly or as needed. Follow the turbocharger manufacturer's guidelines for the amount of cleaning solution and ensure the turbine casing is drained during the process. Operate the turbocharger at reduced speed for ten minutes post-cleaning to ensure thorough drying and normalization of temperatures.

## CONTROL AND MONITORING:

- Register the pressure drop above the air cooler daily, or alternatively, record the temperature at the cooler exit to monitor the cleaning effect. Increased supercharging or scavenging pressure and normalized temperatures indicate effective cleaning.

## APPROVAL:

- The cleaner's composition meets MARPOL Annex V criteria, ensuring it is not harmful to the marine environment. It can be discharged into the sea when used for cleaning cargo holds and external surfaces on ships.



EXCELLENT QUALITY  
ENVIROMENTAL ECOFRIENDLY

# UniClean America

## CRUCIAL NOTICE:

Unlock the Safety Data Sheets (SDS) for UniClean America's products—your compass for health and safety when handling our chemicals. Before diving into our products, every manager and employee must delve into these sheets to ensure a smooth sail through safe usage.

We are committed to providing precise and dependable information. Nevertheless, it's on you, the user, to wield and employ our product prudently, fully aligned with all laws and regulations. UniClean America and our suppliers don't guarantee any warranties—explicit or implied—pertaining to the product, including its marketability. This product is exclusively offered for your scrutiny and trials. This information does not extend any patents or licenses, either stated or inferred.



EXCELLENT QUALITY  
ENVIROMENTAL ECOFRIENDLY