UniClean America

FEATURES AND BENIFITS

- Organic Materials: Made from hard shells of fruit stones, dried and degreased to achieve optimal performance.
- Controlled Particle Size: Particles are precisely sized between 1.3 and 1.7 mm in diameter.
- Environmentally Friendly: 100% organic and free from chemicals, ensuring safe use and disposal.
- Effective Cleaning: Provides a slight abrasive action that keeps turbochargers clean without the need for water or corrosive chemicals.
- Non-Corrosive: Eliminates the risk of acid formation and corrosion in the exhaust system.
- Easy to Use: Can be injected into the turbine using compressed air, ensuring thorough and efficient cleaning.
- **Cost-Effective**: Increases the time between maintenance services, reducing downtime and extending equipment life.
- Improves Efficiency: Keeps exhaust valves and turbochargers clean, promoting better performance and fuel efficiency.
- Safe and Harmless:
 Completely organic and safe
 for the environment, with no
 detrimental effects on the
 equipment.

UCA+ ASTEROIDS

PRODUCT DESCRIPTION:

Unleash the power of precision cleaning with UCA+ ASTEROIDS, the revolutionary organic solution designed to keep the blades of exhaust gas turbochargers in modern diesel engines impeccably clean. Engineered with controlled particle size, UCA+ ASTEROIDS provide a slight abrasive action that effectively removes deposits without causing any detrimental chemical reactions. Say goodbye to the drawbacks of traditional water cleaning methods and embrace the efficiency and safety of UCA+ ASTEROIDS.

Applications: UCA+ ASTEROIDS are perfect for maintaining the cleanliness of the gas side of exhaust gas turbochargers. Regular use ensures that your turbochargers remain free from harmful deposits, significantly extending the time between maintenance services and improving overall

DIRECTIONS FOR USE:

Dry Cleaning System for Turbochargers:

- 1. **Preparation:** Install an adequately dimensioned pipe flange before each gas inlet in the exhaust gas line.
- 2. **Injection:** Blow a specific quantity of UCA+ ASTEROIDS into the exhaust gas lines using compressed air before the gas inlet casing. The quantity depends on the turbocharger size.
- 3. **Interval:** Clean the turbine every 24 to 48 hours of operation. Adjust the interval based on the degree of contamination and exhaust gas temperature increase.
- 4. Cleaning Process:
 - Close the safety valve and open the cock/gate valve.
 - Open the compressed-air stop valve to blow out any deposits and/or condensate.
 - Close the compressed-air stop valve after 3 minutes.
 - Open the safety valve to relieve exhaust gas pressure in the container.
 - Fill the container with the specified quantity of UCA+ ASTEROIDS.
 - Ensure the gas inlet temperature before the turbine does not exceed 580°C 590°C.
 - Open the cock/gate valve and the compressed-air stop valve to blow in the ASTEROIDS.
 - Close the valves in sequence as per the steps.



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Installation of UCA+ ASTEROIDS Cleaning System:

- 1. Install an adequately dimensioned pipe flange before each gas inlet in the exhaust gas line.
- 2. Manufacture containers corresponding to the number of gas inlets.
- 3. Mount the necessary fittings such as valves.
- 4. Mount the container with the provided strap at an easily accessible location, with the cock or gate valve at least 300 mm above the pipe flange.
- 5. Ensure the maximum distance between the cock or gate valve and the pipe flange/exhaust gas line is 1 meter.
- 6. Arrange the compressed-air pipe to the container and mount a connecting pipe (outside diameter: 16 mm, inside diameter: 12 mm, maximum length: 1 meter).

Cleaning Procedures:

- 1. Close the safety valve and tighten the valve cap. Open the cock/gate valve.
- 2. Open the compressed-air stop valve to blow out any deposits and/or condensate in the connecting pipe. Close the valve after about 3 minutes.
- 3. Close the cock/gate valve.
- 4. Open the safety valve to relieve exhaust gas pressure in the container, then close it.
- 5. Remove the valve cap and fill the container with the specified quantity of UCA+ ASTEROIDS.
- 6. Ensure the gas inlet temperature before the turbine is below 590°C.
- 7. Open the cock/gate valve and the compressed-air stop valve to blow in the ASTEROIDS. Close the valves after 1 to 1.5 minutes.
- 8. Repeat steps for each turbocharger.

General Regulations:

- The gas inlet temperature before the turbine must not exceed $580^{\circ}\text{C} 590^{\circ}\text{C}$.
- The boost pressure should be over 0.5 bar.
- The drain openings in the gas outlet casing must remain closed during dry cleaning.
- The main particle size of the cleaning granulate must be between 1.3 and 1.7 mm.
- ASTEROIDS are produced from hard shells of fruit stones that have been stabilized by drying and degreasing. Ligneous residues
 and foreign matter such as mineral or metallic particles are eliminated.

Why Choose UCA+ ASTEROIDS? UCA+ ASTEROIDS offers a superior cleaning solution that not only enhances the performance of your diesel engines but also ensures environmentally safe and efficient operation. By maintaining your turbochargers in perfect condition, UCA+ ASTEROIDS helps you achieve optimal efficiency, reduce maintenance costs, and extend the life of your equipment. Experience the innovative cleaning power of UCA+ ASTEROIDS and keep your turbochargers operating at their best. Choose UCA+ ASTEROIDS for a cleaner, safer, and more efficient solution to your turbocharger maintenance needs.



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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.

