

DRAFT

Technical Safety Data Sheet

Equipment Name: Oxygen Component Ultrasonic Cleaning System

Manufacturer: CAE Blackstone, Inc.

Address

9 North Main
Jamestown, New York 14702

Telephone Number: (716) 665-2340

Fax Number: (716) 665-2480

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Equipment Description: This equipment (24" wide, 36" length, and 32" tall) is used to clean oxygen system components such as piping and valves. The equipment consists of two stainless steel tanks equipped with ultrasonic transducers and heating strips. One tank is used to clean parts with 50 % Naval Oxygen Cleaner (NOC) and 50 % demineralized water. The other tank is used to rinse the cleaned parts with 100 % demineralized water. Tank access is provided by a removable lid. Two metal baskets equipped with drain holes are used to contain parts during the cleaning and rinsing cycles.

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Precautions for Safe Handling and Use:

DO NOT USE ACIDS, VOLATILE, EXPLOSIVE, OR COMBUSTIBLE LIQUIDS WITH THIS EQUIPMENT.

Do not immerse hands in the cleaning and rinsing tanks. Cleaning liquid is hot (140 °F) and toxic and will burn and irritate the skin. Tanks contain high frequency (40kHz) ultrasonic energy (frequencies above 18 kHz are considered to be ultrasonic) which will cause skin irritation.

Do not drop cleaning basket into tank. Doing so may cause the splashing of hot and toxic cleaning solution.

Use rubber matting or non-skid surface in operating area to prevent slipping from cleaning solution that is spilled during removal of tank cover and removal of cleaned parts.

Wear personal protective equipment during equipment operation. See Control Measures section for description.

This equipment contains capacitors and may pose a maintenance electrical shock hazard after equipment has been deenergized. Capacitors must be discharged before commencing equipment maintenance or repair.

Shut off the electrical power before commencing any maintenance or repair work.

Use manufacturer manual AQ-2-1122 to operate equipment.

Health Hazard Data

Chemical Hazard (NOC Cleaning Solution):

Primary Routes of Exposure: Skin

Effects of Over Exposure: Full strength material may cause burns to eyes and digestive system. Will irritate and defat skin.

Eyes: In case of contact with eyes, flush with water for 15 minutes. Seek medical attention.

Skin: In case of skin contact, wash thoroughly and rinse.

Ingestion: If ingested, drink milk or water to dilute product. **Do not induce vomiting.** Seek medical attention.

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Reactivity Data: Incompatible with acids.

For additional, detailed information on NOC Cleaning Solution, see Material Safety Data Sheet (MSDS).

Physical Hazard: Water drips on the deck when removing the parts basket and access cover from the tanks, creating a slip hazard. It is difficult to grasp the parts basket handles while removing the basket from the tanks because the handles are too close to the inner walls of the tanks. This could cause the operator to drop the basket into the tank, splashing hot and toxic cleaning solution.

Biological Hazard: None observed

Ergonomic Hazard: None observed

Control Measures

Respiratory Protection: Not needed under normal conditions of use.

Ventilation Requirements: Operate equipment in well ventilated area.

Eye Protection: Wear chemical goggles or face shield while pouring cleaning solution into tank, inserting parts basket into tanks, and removing parts from the tanks.

Protective Gloves: Wear rubber, PVC or neoprene gloves while pouring cleaning solution into tank, inserting parts basket into tanks, and removing cleaned parts from the tanks.

Protective Clothing: Wear chemical resistant apron.

Posting Requirements: Personal protective equipment (PPE) requirements should be posted in the equipment operating area.