

UNITED

L A B O R A T O R I E S

DESCRIPTION – United 417:

- A blend of corrosion inhibitors, penetrants and mild acids for use in descaling metal and wood surfaces.
- Removes rust, lime, hard water deposits, grease, and oxidation from surfaces that could be harmed by strong acids such as muriatic, hydrochloric, or sulfuric. (Do not use on galvanized or zinc surfaces.)
- Can be left in the system for long periods of time (24 to 48 hours) to achieve maximum descaling, with complete safety.

DIRECTIONS FOR USE:

1. Use a fire hose, garden hose, or pressure washer to flush out as much loose material as possible.
2. Close all valves leading to the steam manifold. Close bottom blowdown and lower hand-holes and fill boiler with the hottest water available. Add 10 gallons of **United 417** for each 100 gallons (10 litres for each 100 litres) of boiler capacity. One top hand hole or other vent must be left open.
3. Fire the boiler periodically to maintain the temperature of the descaling solution at 120-140°F (50-60°C).
4. Check the descaling solution color at 15-30 minute intervals. Red color indicates pH less than 3.0; absence of color indicates pH above 3.0. If the pink color fades (pH rises above 3.0) the **United 417** is exhausted and more should be added.
5. Once the pH has stayed below 3.0 (color remains pink) for at least two hours, drain off the chemical solution and use the fire hose, garden hose or pressure washer again to flush out all material loosened or softened, but not completely dissolved, by the chemical.
6. Carefully close all hand-holes and man-holes using new gaskets.
7. Begin refilling the boiler with the blowdown open. Once the blowdown runs clear, close the blowdown valve and fill the boiler to its normal operating level.
8. Add the appropriate initial dose of the recommended United Laboratories boiler treatment product and return the boiler to service.

United 417

Descaler For Steam Boilers

KEEP OUT OF REACH OF CHILDREN.

CAUTION

HARMFUL IF SWALLOWED.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

PRECAUCION AL USARIO:

Si usted no puede leer Ingles, pregunte a alguien que le traduzca esta etiqueta para usted antes de uso.

UNITED LABORATORIES, INC.
320 37th Avenue • St. Charles, IL 60174
1-800-323-2594 • www.unitedlabsinc.com

FOR BOILERS IN FOOD PLANTS: A thorough flush with potable water is required when cleaning is completed, prior to preparation to return boilers to service.

CAUTION:

CONTAINS PHOSPHORIC ACID (CAS# 7664-38-2). Protect eyes, skin, and clothing when using this product or solutions made from it.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Immediately flush with plenty of water for at least 15 minutes while holding eyelids open to ensure thorough rinsing of the entire surface of the eye and lids with water. Call a physician or poison center immediately.

SKIN: Wash with soap and plenty of water. Remove contaminated clothing and wash before reuse. If symptoms develop, call a physician or poison center.

INHALATION: Remove to fresh air. If symptoms develop, call a physician or poison center. If not breathing, give artificial respiration.

INGESTION: DO NOT induce vomiting. Call a physician or poison center immediately. If conscious, give several glasses of water to dilute. Never give anything by mouth to an unconscious person.

An MSDS for this product is available through United's website, www.unitedlabsinc.com, providing 24 hour access. Please read the MSDS carefully and follow all directions when using or handling this product. Never reuse empty containers. Incompatible materials may adversely react.

HMIS® III CODE: 0=MINIMAL 1=SLIGHT 2=MODERATE 3=SERIOUS 4=SEVERE PERSONAL PROTECTION INDEX: Gloves and Goggles	HEALTH	2
	FLAMMABILITY	0
	PHYSICAL HAZARD	0
	PERSONAL PROTECTION	n&p