

CC-300 Cooler Cleaner

External fin-fan cooler cleaning system

Controlled safety source: SDS_CC300.pdf, SDS UC-002, revision January 20, 2026. This TDS does not replace the current Safety Data Sheet.

PRODUCT OVERVIEW

CC-300 is a professional acidic external cooler-core cleaner designed to remove mineral scale, dirt, dust, oil film, biological material, insects and other deposits that restrict airflow and reduce heat transfer.

Recommended use	Lime and scale removal / external cooler cleaning	Physical state	Liquid
Appearance / odor	Clear liquid / slight acidic odor	pH	2
Specific gravity	1.26	Boiling point	102 C / 216 F
Water solubility	Completely soluble	Flash point	Non-flammable
Transport	UN1805 Phosphoric acid solution, Class 8, PG III	Ecology	Toxic to aquatic life with long lasting effects

KEY SAFETY AND OPERATING POINTS

- Skin Corrosion Category 1B and Serious Eye Damage Category 1.
- Signal word: Danger. Causes severe skin burns and eye damage.
- Avoid breathing mist or spray and use adequate ventilation.
- Wear protective gloves, protective clothing, eye protection and face protection.
- Keep separate from strong alkalis, bleach, ammonia and unknown chemicals.
- Protect drains, surface water and groundwater-sensitive areas from uncontrolled runoff.

SHIPPING, PACKAGE AND LOGISTICS

Variant	Physical Package	SKU	Gross Weight	Dimensions	NMFC	Class
Standard	1 Gallon Jug	CC001	10.5 lb	6 x 6 x 12 in	44155	70
Standard	5 Gallon Bucket	CC005	55 lb	10.25 x 10.25 x 14.75 in	44155	70
Standard	55 Gallon Drum	CC055	597.5 lb	23.5 x 23.5 x 35 in	44155	70
Standard	250 Gallon Tote	CC250	2,775 lb	40 x 47 x 46 in	44155	70

Transportation: DOT, IATA and IMDG: UN1805, Phosphoric acid solution, Hazard Class 8, Packing Group III. SDS Section 15 lists a 5,000 lb CERCLA RQ for phosphoric acid.

NFPA 704

	Health	2	Moderate health hazard
	Flammability	0	Non-flammable
	Instability	0	Stable under normal conditions
	Special	-	Not determined

GHS HAZARD COMMUNICATION

	GHS05 Corrosion Danger Causes severe skin burns and eye damage.
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STANDARD APPLICATION PARAMETERS

Application equipment: approximately 2,800 to 3,000 PSI and approximately 2.5 GPM using an aerator foaming tip. Adjust pressure, distance or spray pattern as needed to protect fins and comply with equipment limitations.

1. Position the applicator on the far side of the cooler so the chemical is driven through the core toward the recovery or rinse side.
2. Begin at the bottom of the cooler and apply in a controlled vertical up-and-down motion using an approximately 12-inch spray pattern.
3. Coat uniformly and ensure foam penetrates the full depth of the core.
4. Pay particular attention to heavily loaded areas, corners, lower sections and oil-film zones.
5. Standard dwell time is 10 to 15 minutes. Heavy deposits may be extended toward 20 minutes while the surface remains wet.
6. Keep the treated surface wet during dwell. Reapply a light coat or begin rinsing if drying starts.
7. A total dwell period beyond 30 minutes requires written technical authorization and a material-compatibility review.
8. Control overspray and keep it away from personnel, vehicles, painted surfaces, electrical components and incompatible materials.

WATER-RINSE PROCEDURE

Standard rinse equipment: clean water, up to approximately 4,000 PSI and approximately 4.5 GPM, using a size 6.5 tip with a 25-degree or 40-degree pattern. Use the lowest effective pressure and sufficient standoff distance to protect fins.

9. Begin rinsing before the product dries.
10. Rinse from top to bottom so released contamination moves toward containment.
11. Use an approximately 2 to 4-inch standoff only when tip, angle and pressure do not distort the fins. Increase distance or reduce pressure if fin movement is observed.
12. Direct the spray as square through the fin passages as practical. Avoid prolonged oblique spraying across fragile fin edges.
13. Rinse both faces when access permits and continue until foam, loosened solids and visible contamination are removed and rinse water runs clear.
14. Inspect the downstream face and core depth for full penetration and removal. Repeat locally when necessary.
15. Recover or direct rinse water into the site-approved containment, process drain or treatment system.
16. Flush pressure-washer hoses, chemical injectors, pumps and accessories with clean water after use.

PRE-JOB PLANNING AND INSPECTION

- Review the current CC-300 SDS, this TDS, site rules and the job safety analysis.
- Confirm the cooler is shut down, isolated and safe to access unless the site has an approved cleaning method for operating equipment.
- Identify electrical equipment, rotating equipment, hot surfaces and other hazards; protect or isolate them as required.
- Inspect for damaged, loose or severely bent fins, leaking tubes, compromised coatings and areas vulnerable to pressure damage.
- Identify runoff paths, drains, soil, waterways and sensitive receptors and install the required containment.
- Record equipment ID, date, ambient temperature, pre-cleaning coolant temperature if available, pressure-washer settings and estimated product quantity.
- Photograph both sides of the cooler and representative fouling conditions.

RINSE-WATER MANAGEMENT AND ENVIRONMENTAL HANDLING

Rinsate disposition depends on site conditions, the deposits removed and applicable permits. Cleaning can remove oil, solids, metals and other accumulated material. pH is only one factor in determining the proper handling or discharge route.

- High-sensitivity area: use portable berms, drain covers and vacuum recovery sized for anticipated rinse-water volume. Collect in sealed containers for approved treatment or disposal.
- Standard industrial site: capture in a sump, process drain or recovery system connected to approved treatment and maintain required records.
- Remote or non-sensitive area: control runoff and prevent migration, pooling and erosion. Discharge or land application only when specifically permitted.
- Collect a representative sample after cleaning. Measure and record pH and inspect for visible oil sheen, solids, unusual color and odor.
- Reacted rinsate may commonly fall near pH 6 to 8, but actual field measurement and site requirements control.
- Retain rinsate when the approved disposition route is uncertain.

POST-CLEANING INSPECTION AND PERFORMANCE VERIFICATION

17. Inspect the cooler for remaining blockage, bent fins, leaks, coating damage and trapped debris.
18. Use a fin comb only when appropriate and only by personnel trained to avoid tube damage.
19. Obtain customer or site representative inspection and approval before returning equipment to service.
20. Photograph both faces and representative cleaned areas.
21. Return equipment to service according to the owner's startup procedure.
22. After approximately 30 minutes of stable operation, record ambient temperature, coolant temperature and any agreed performance indicators.
23. Compare post-cleaning temperatures with pre-cleaning conditions only when load, ambient conditions, fan operation and instrumentation are sufficiently comparable.
24. Record recommendations for additional cleaning, mechanical repair, airflow correction or follow-up inspection.

FIRST AID AND EMERGENCY RESPONSE

Exposure	Current SDS direction
Eyes	Flush with plenty of water for at least 15 minutes. Remove contact lenses after initial flushing. Immediately call a poison center or physician.
Skin	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Immediately call a poison center or physician.
Inhalation	Remove to fresh air. Call a physician immediately.
Ingestion	DO NOT induce vomiting. Drink plenty of water. Immediately call a poison center or physician.
Spill	Stop release if safe. Protect drains. Absorb with inert material. Neutralize only by trained personnel using an approved acid-neutralizing procedure. Transfer to properly labeled containers.
Fire	Use dry chemical, carbon dioxide or water spray/fog as appropriate. Firefighters require full protective equipment and SCBA.

Emergency contact: INFOTRAC 1-800-535-5053 North America; 1-352-323-3500 International.

STORAGE, REACTIVITY AND CRITICAL RESTRICTIONS

- Keep container tightly closed in a cool, dry, well-ventilated place. Store locked up and out of reach of children.
- Protect from freezing. If frozen, allow the product to thaw completely before use.
- Keep separated from strong alkalis, bleach, ammonia and unknown chemicals.
- Keep CC-300 wet during dwell and rinse it completely from the cooler.
- Keep high-pressure spray away from personnel, electrical equipment, rotating machinery and fragile components.
- Stop and adjust the method if fins begin to bend or equipment damage is observed.
- Route rinsate only to a site-approved containment, treatment or discharge location.
- Obtain owner approval before returning leaking or mechanically damaged equipment to service.

TRANSPORTATION AND REGULATORY PROFILE

Mode / Field	Controlled value
DOT	UN1805, Phosphoric acid solution, Class 8, Packing Group III
IATA	UN1805, Phosphoric acid solution, Class 8, Packing Group III
IMDG	UN1805, Phosphoric acid solution, Class 8, Packing Group III
CERCLA RQ	5,000 lb for phosphoric acid

DOCUMENT CONTROL

Product	CC-300 Cooler Cleaner
Product code	CC
Safety source	SDS_CC300.pdf SDS UC-002 revision January 20, 2026 Version 1
Operational source	CC300_TDS.PDF Revision 2, August 4, 2026
Shipping source	2026 Ultimate Chemicals Product Shipping Specs Matrix.xlsx
NFPA asset	NFPA_2-0-0.svg
GHS asset	GHS05_Corrosion.png
Header artwork	MASTER_PRODUCT_LOGO_CC-300_TRANSPARENT.png
Program/footer artwork	zhccs_869k.png Zero Hour Certified Cooling System badge

QUICK ACCESS

Scan the QR code or select the printed URL. Each printed URL is embedded as a clickable PDF hyperlink.

PRODUCT PAGE  https://ultimatechemicals.com/products/cc300	SDS  https://ultimatechemicals.com/sds/cc300	TDS  https://ultimatechemicals.com/tds/cc_tds.pdf
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