

ACC After Cooler Cleaner

Acidic lime and scale remover for controlled after-cooler immersion cleaning

Controlled safety source: SDS UC-020, revision January 20, 2026. This Technical Data Sheet does not replace the current Safety Data Sheet.

PRODUCT OVERVIEW

ACC After Cooler Cleaner is an acidic cleaner intended for lime and scale removal from removed after coolers and comparable heat-transfer components suitable for controlled immersion cleaning. The approved operating procedure uses a 1:4 dilution, room-temperature full immersion, no agitation, a soak of 30 minutes maximum, and a thorough clean-water pressure rinse.

Recommended use	Lime and scale removal	Physical state	Liquid
Appearance / color	Clear liquid	Odor	Slight acidic
pH	2	Specific gravity	1.26
Boiling range	102°C / 216°F	Flash point	Non-flammable
Water solubility	Completely soluble	Signal word	Danger

KEY SAFETY AND OPERATING POINTS

- Causes severe skin burns and eye damage. Prevent direct contact and use required chemical-resistant PPE.
- Avoid breathing vapor, spray, or mist. Provide adequate ventilation, especially in enclosed areas.
- Do not mix with strong alkalis, bleach, ammonia, or unknown chemicals.
- Use only the approved 1:4 dilution: one part ACC to four parts clean water.
- Use at room temperature with no agitation. Fully submerge the compatible component and soak for 30 minutes maximum.
- Toxic to aquatic life with long lasting effects. Prevent uncontrolled release and manage spent solution and rinse water through a site-approved route.

SHIPPING, PACKAGE AND LOGISTICS

Variant	Physical Package	SKU	Gross Weight	Dimensions	NMFC	Freight Class
1 Gallon	1 Gallon Jug	ACC001	8.8 lb	6 x 6 x 12 in	44155	70
5 Gallon	5 Gallon Bucket	ACC005	46.5 lb	10.25 x 10.25 x 14.75 in	44155	70
55 Gallon	55 Gallon Drum	ACC055	504 lb	23.5 x 23.5 x 35 in	44155	70
250 Gallon	250 Gallon Tote	ACC250	2,350 lb	40 x 47 x 46 in	44155	70

DOT: UN1805, Phosphoric Acid solution, Hazard Class 8, Packing Group III. Class 8 CORROSIVE labeling and applicable UN identification and proper shipping name marking are required for fully regulated shipments. The current SDS notes package-size exceptions may apply only when all regulatory conditions are met.

NFPA 704



Health	2	Moderate hazard
Flammability	0	Will not burn under typical fire conditions
Instability	0	Normally stable
Special	—	Not determined in current SDS

GHS HAZARD COMMUNICATION



GHS05 Corrosion
Skin corrosion/irritation Category 1B
Serious eye damage/eye irritation Category 1
Signal word: Danger
Hazard statement: Causes severe skin burns and eye damage.

REQUIRED PPE AND WORK CONTROLS

- Chemical splash goggles and face shield.
- Chemical-resistant gloves suitable for acidic solutions.
- Long sleeves, long pants, and chemical-resistant clothing or apron.
- Chemical-resistant boots where splashing, draining, or pooling can occur.
- Respiratory protection when ventilation is inadequate and as required by the site respiratory-protection program.
- Eyewash and emergency water immediately available.

REQUIRED EQUIPMENT AND MATERIALS

- ACC in the required quantity and original labeled container.
- Clean water for dilution and final rinsing.
- Chemically compatible immersion container large enough to fully submerge the after cooler.
- Measuring containers or metering equipment for the 1:4 dilution.
- Mechanical lifting and rigging equipment suitable for the component weight.
- Pressure washer and a spray pattern that will not damage fins, tubes, seals, or coatings.
- Drain pans, containment berms, drain covers, recovery equipment, sealed compatible recovery drums or IBC totes as required.
- pH test strips or calibrated handheld pH meter, inspection light, photographs, and job log.

PRE-JOB PLANNING AND INSPECTION

1. Review the current ACC SDS, this TDS, site rules, and the job safety analysis with all personnel.
2. Confirm the after cooler has been removed, depressurized, drained, isolated, and made safe for handling.
3. Verify that the immersion container, lifting equipment, and work area can safely support the component and solution volume.
4. Inspect the after cooler for cracks, leaks, loose fins, compromised coatings, dissimilar metals, and pre-existing damage.
5. Confirm material compatibility before immersion. Do not assume all aluminum alloys, coatings, solders, seals, or repair materials are suitable.
6. Determine the quantity of mixed solution required to fully submerge the component.
7. Install containment and protect drains before mixing or transferring ACC.
8. Record equipment identification, date, personnel, pre-cleaning condition, and photographs.

DILUTION AND SOLUTION PREPARATION

STANDARD DILUTION: 1:4. One part ACC After Cooler Cleaner to four parts clean water. Prepare only the volume needed to fully submerge the after cooler. Add ACC slowly to the measured water while controlling splash and heat. Do not add water into a container of concentrated ACC.

Example: 1 gallon ACC plus 4 gallons water produces 5 gallons of working solution.

Example: 5 gallons ACC plus 20 gallons water produces 25 gallons of working solution.

Do not mix ACC with any other cleaner, neutralizer, or treatment chemical.

ACC IMMERSION CLEANING PROCEDURE

1. Place the prepared 1:4 ACC solution in the compatible immersion container.
2. Lower the after cooler into the container using approved lifting equipment.
3. Fully submerge the after cooler in the ACC solution.
4. Maintain the solution at room temperature.
5. Do not agitate the solution or component.
6. Soak for 30 minutes maximum.
7. Maintain containment and restrict access throughout the soak period.
8. After soaking, lift the aftercooler from the container and allow excess solution to drain back into containment.
9. Inspect the component before rinsing for loosened deposits and any evidence of material attack or damage.
10. Use with foaming tip to apply or pump up sprayer.

PRESSURE-WASHER RINSE PROCEDURE

1. Move the after cooler to the contained rinse area.
2. Rinse thoroughly with clean water using a pressure washer.
3. Use the lowest effective pressure, a safe standoff distance, and a spray angle that will not bend fins or damage tubes, seals, or coatings.
4. Rinse all accessible passages, faces, and internal flow paths until loosened material and residual cleaner are removed.
5. Continue rinsing until the rinse water is visibly clear and the component is free of foam and cleaner residue.
6. Repeat the immersion and rinse process when necessary and when the component remains compatible and undamaged.
7. Flush pressure-washer equipment and accessories with clean water after use.

SPENT SOLUTION, RINSE WATER AND ENVIRONMENTAL HANDLING

- Do not discharge spent ACC solution or contaminated rinse water without site authorization.
- Collect spent solution and rinse water when required by site conditions, contamination, permits, or local requirements.
- Evaluate pH together with removed scale, metals, oil, and other contamination before selecting a disposal or treatment route.
- Keep all solution and rinsate out of storm drains, surface water, and groundwater-sensitive areas.
- Document estimated volume, pH, containment method, treatment or disposal route, and responsible person.
- When the approved disposition route is uncertain, retain the material in labeled containers pending direction from the site representative or environmental authority.

POST-CLEANING INSPECTION AND VERIFICATION

1. Inspect the after cooler for remaining scale, blockage, bent fins, leaks, coating damage, and evidence of chemical attack.
2. Photograph the cleaned component and representative internal or external surfaces.
3. Repeat treatment only when necessary and after confirming continued material compatibility.
4. Obtain customer or site representative inspection and approval before reinstallation.
5. Reinstall, pressure-test, and return the after cooler to service according to owner and equipment-manufacturer procedures.
6. Record any recommendations for repair, additional cleaning, or follow-up inspection.

FIRST AID AND EMERGENCY RESPONSE

Exposure	Required response from current SDS
Eyes	Immediately flush with plenty of water. Remove contact lenses after initial flushing when easy to do and continue flushing for at least 15 minutes. Immediately call a poison center or physician.
Skin	Immediately 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	Prevent further leakage if safe. Protect drains. Contain and absorb with inert material. Transfer to properly labeled compatible containers. Neutralization is permitted only by trained personnel using an approved procedure.
Fire	Use dry chemical, carbon dioxide, or water spray/fog. Firefighters require full protective equipment and self-contained breathing apparatus.

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

STORAGE, REACTIVITY AND ESSENTIAL 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 product freezes, allow it to thaw completely prior to use.
- Store away from incompatible materials. Strong alkalis, bleach, and ammonia are incompatible.
- Use ACC only with the current SDS, required PPE, and applicable site procedure.
- Use the approved 1:4 dilution at room temperature with no agitation and a soak of 30 minutes maximum.
- Fully submerge only components confirmed to be materially compatible.
- Use the lowest effective rinse pressure and stop if fins or other components begin to move or deform.

- Do not discharge spent solution or rinse water to an unapproved location.
- Do not return leaking, damaged, or chemically attacked equipment to service without owner approval.

TRANSPORTATION AND REGULATORY PROFILE

Mode / Field	Controlled value
DOT	UN1805, Phosphoric Acid solution, Hazard Class 8, Packing Group III
IATA	UN1805, Phosphoric Acid solution, Hazard Class 8, Packing Group III
IMDG	UN1805, Phosphoric Acid solution, Hazard Class 8, Packing Group III
CERCLA RQ	Phosphoric acid RQ 5,000 lb. No listed package reaches the 5,000 lb constituent RQ because total package weight is below the RQ.
Emergency contact	INFOTRAC 1-800-535-5053 North America; 1-352-323-3500 International

FIELD DOCUMENTATION CHECKLIST

Customer/site and equipment identification	Date and personnel
Pre-job photographs	Component condition before cleaning
ACC quantity used	Water quantity used
Confirmed 1:4 dilution	Immersion start time
Immersion end time	Room-temperature condition
No-agitation verification	Rinse method and pressure setting
Spent-solution volume	Rinse-water volume
Containment and disposal method	Post-cleaning photographs
Customer inspection/approval	Repair or follow-up recommendations

DOCUMENT CONTROL

Product	ACC After Cooler Cleaner
Product code	ACC
Safety source	SDS_ACC.pdf SDS UC-020 revision January 20, 2026 Version 1
Operational source	ACC_TDS.PDF Revision 1, August 4, 2026, applied only where not superseded by the current SDS
Shipping source	2026 Ultimate Chemicals Product Shipping Specs Matrix.xlsx
NFPA asset	NFPA_2-0-0.svg
GHS asset	GHS05_Corrosion.png
Program/footer artwork	Approved 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/acc	SDS  https://ultimatechemicals.com/sds/acc	TDS  https://ultimatechemicals.com/tds/acc_tds.pdf
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