

GSF Gas Section Flush

Concentrated gas-section and stage-cooler flush

Controlled safety source: SDS_GSF.pdf, SDS UC-013, revision January 20, 2026. This TDS does not replace the current Safety Data Sheet.

PRODUCT OVERVIEW

GSF Gas Section Flush is a concentrated flush used to clean gas-section and stage-cooler sections on natural-gas compressor equipment. The current SDS identifies the recommended use as natural gas compressor injection.

Appearance / state	Lime green liquid	Odor	Slight acidic
pH	2	Specific gravity	1.26
Boiling point	102 C / 216 F	Flash point	Non-flammable
Water solubility	Completely soluble	Transport	UN1805 Phosphoric Acid solution, Class 8, PG III

APPROVED MIXING

CONCENTRATED - MIX 1:4

Mix 1 part GSF to 4 parts deionized water.

- Measure 1 part concentrated GSF.
- Measure 4 parts deionized water.
- Mix thoroughly before circulation.
- Keep the mixed solution in a compatible, properly labeled tote with adequate freeboard for return flow.
- Do not substitute tap water, process water, coolant, glycol or another chemical for deionized water unless specifically authorized.

SHIPPING, PACKAGE AND LOGISTICS

Variant	Physical Package	SKU	Gross Weight	Dimensions	NMFC	Class
Standard	55 Gallon Drum	GSF055	504 lb	23.5 x 23.5 x 35 in	44155	70
Standard	250 Gallon Tote	GSF250	2,350 lb	40 x 47 x 46 in	44155	70

DOT, IATA and IMDG: UN1805, Phosphoric Acid solution, Class 8, Packing Group III. CERCLA reportable quantity for phosphoric acid: 5,000 lb. The listed packages remain below the constituent RQ. NMFC 44155 / Class 70 is the current controlled matrix value and remains subject to ClassIT+ confirmation.

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.
Toxic to aquatic life with long lasting effects.

PRE-JOB REQUIREMENTS

- Shut down, isolate, depressurize and lock out/tag out the equipment before opening gas-section or cooler piping.
- Verify each section can be isolated and that the tote, pump, hoses, valves, flanges, gaskets and fittings are compatible with acidic service.
- Provide secondary containment and confirm access to eyewash, emergency shower, spill-control materials and the current GSF SDS.
- Wear chemical-resistant gloves and clothing, chemical splash goggles and a face shield.
- Ensure adequate ventilation, especially in confined areas.

CONTROLLED GAS SECTION FLUSH PROCEDURE

1. Flange the send and return lines for each stage-cooler section to be cleaned.
2. Install a 1-inch ball valve on each flange.
3. Connect the pump discharge hose to the lowest-point connection of the section.
4. Place the return hose into the top of the tote and secure it against movement.
5. Pump the thoroughly mixed GSF solution from the tote into the section from the lowest point.
- 6. Circulate the GSF solution through the isolated section for 4 hours.**
7. Monitor tote level, hose condition, fittings, pump operation, leakage and return flow during circulation.
8. After 4 hours, stop the pump and drain all flush solution into an approved recovery container, then rinse.
9. Remove temporary ball valves and flanges.
10. Reattach the unit for normal operation using approved gaskets, fasteners and site assembly procedures.
11. Perform a final leak and connection inspection before returning the equipment to service.

FIRST AID FROM CURRENT SDS

Exposure	Current SDS direction
Eyes	Immediately flush with plenty of water. After initial flushing, remove contact lenses and continue flushing for at least 15 minutes.
Skin	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Inhalation	Remove to fresh air.
Ingestion	DO NOT induce vomiting. Drink plenty of water. Immediately call a poison center or doctor/physician.

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

SAFE HANDLING AND STORAGE

- Avoid all skin and eye contact. Do not breathe mist, vapor or spray.
- Wash hands, face and exposed skin thoroughly after handling.
- Keep the container tightly closed in a cool, dry and well-ventilated place.
- Store locked up and out of reach of children.
- Protect from freezing. If frozen, thaw completely before use.
- Keep away from strong alkalis, bleach, ammonia and unknown incompatible chemicals.

SPILL, FIRE AND ENVIRONMENTAL HANDLING

- Stop the release if safe and maintain secondary containment.
- Absorb spills with inert material and transfer recovered material to properly labeled compatible containers.
- Use only a site-approved neutralization method. Do not improvise neutralization.
- Do not discharge GSF, mixed flush, rinsate or recovered contaminants to soil, storm drains, surface water or groundwater-sensitive areas.
- Suitable fire media: dry chemical, carbon dioxide or water spray/fog.
- Firefighters should use self-contained breathing apparatus and full protective gear.
- GSF is toxic to aquatic life with long lasting effects and is listed as readily biodegradable.

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
California Proposition 65	Current SDS states this product does not contain Proposition 65 chemicals.

ESSENTIAL OPERATING RESTRICTIONS

- Mix 1 part GSF to 4 parts deionized water.
- Circulate for 4 hours.
- Pump into the section from the lowest point and return to the top of the tote.
- Do not operate or pressurize the unit while temporary circulation connections are installed.
- Do not return used flush to the original concentrate container.
- Record unit identification, stage-cooler section, GSF lot number, concentrate and deionized-water quantities, circulation start and stop times, recovered-waste quantity, reassembly and final leak inspection.

DOCUMENT CONTROL

Product	GSF Gas Section Flush
Product code	GSF
Safety source	SDS_GSF.pdf SDS UC-013 revision January 20, 2026 Version 1
Operational source	GSF_TDS.PDF Revision 1, 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	Approved Ultimate Chemicals logo upper left; approved glow fallback upper right
Program/footer artwork	Approved glow logo. GSF is not on the controlled Zero Hour badge list.

QUICK ACCESS

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

PRODUCT PAGE



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TDS



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