

HDF Heavy Duty Flush

Ready-to-use cooling-system flush for burnt and severely degraded glycol contamination

Controlled safety source: SDS_HDF.pdf, SDS UC-009, revision January 20, 2026. This TDS does not replace the current Safety Data Sheet.

PRODUCT OVERVIEW

HDF Heavy Duty Flush is a cooling-system flush intended for burnt-glycol and severe degraded-glycol contamination when selected by an approved diagnostic recommendation.

Recommended use	Dissolves buildup in cooling systems	Physical state	Liquid
Appearance / odor	Clear liquid / pleasant	pH	8.5-9.5
Water solubility	Completely soluble	Boiling point	100 C / 212 F
Flash point	Non-flammable	Transport	Not regulated
Hazard classification	Not classified as a hazardous substance or mixture	NFPA	1-0-0

CRITICAL PRODUCT CONDITION

NO DILUTION - HDF IS READY TO USE.

- Use HDF directly from the original labeled container.
- Do not dilute HDF with water.
- Fill the cooling system with HDF as supplied.
- Water is used only during the final deionized-water rinsing sequence after HDF has been drained.
- HDF may be used alone or in an approved combination procedure depending on the diagnosed cooling-system condition.

SHIPPING, PACKAGE AND LOGISTICS

Variant	Physical Package	SKU	Gross Weight	Dimensions	NMFC	Class
Standard	55 Gallon Drum	HDF055	504 lb	23.5 x 23.5 x 35 in	48580	70
Standard	250 Gallon Tote	HDF250	2,350 lb	40 x 47 x 46 in	48580	70

Provisional HDF500 and HDF750 tote variants are excluded pending concentration-specific packaged-weight and final-SKU verification. DOT, IATA and IMDG: not regulated as dangerous goods or hazardous materials. NMFC 48580 / Class 70 is the current master-matrix value and remains subject to ClassIT+ confirmation.

NFPA 704



Health	1	Slight health hazard
Flammability	0	Non-flammable
Instability	0	Stable under normal conditions
Special	-	Not determined

GHS HAZARD COMMUNICATION

No GHS pictogram required

Current SDS: not classified as a hazardous substance or mixture.
Signal word: none.
Hazard statements: none.

SAFE HANDLING AND PPE

- The current SDS does not classify HDF as a hazardous substance or mixture, but normal chemical-handling controls still apply.
- Wear safety glasses. Use goggles where splashing may occur.
- Use suitable gloves and impervious clothing based on the volume handled and splash potential.
- Avoid breathing vapor or mist. Ensure adequate ventilation, especially in enclosed areas.
- Provide eyewash stations and emergency showers near the work area.
- Concentrated product on floors may be slippery. Contain and clean spills promptly.
- Protect HDF from freezing. If frozen, thaw completely before use.

STORAGE AND INCOMPATIBILITIES

- Keep the container tightly closed in a cool, dry and well-ventilated place.
- Store locked up and keep out of reach of children.
- Protect from freezing; thaw completely before use if frozen.
- Section 7 lists acids, bleach and ammonia as incompatible.
- Section 10 lists oxidizing agents as incompatible.
- Do not mix with unknown chemicals.

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. Immediately call a poison center or doctor/physician.
Skin	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Inhalation	Remove to fresh air. Call a physician immediately.
Ingestion	Induce vomiting. Drink a large quantity of milk. Immediately call a poison center or doctor/physician.

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

SPILL, FIRE AND ENVIRONMENTAL HANDLING

- Stop the release if safe, protect drains and contain the liquid.
- Absorb with inert material and place recovered material in properly labeled containers.
- The SDS permits neutralizing residue with citric acid or another neutralizing agent for basic materials; use only a site-approved neutralization procedure.
- Use extinguishing measures appropriate to local conditions and the surrounding fire; water may cool exposed containers.
- Overheated drums may rupture because of steam.
- The product is readily biodegradable and not classified as environmentally hazardous, but large or frequent spills may still cause harm.
- Spent HDF may contain degraded glycol, metals, oil, scale and other engine-system residues and should be managed as contaminated cooling-system waste.

OPERATING CONTROL

HDF is intended for burnt-glycol and severe degraded-glycol contamination when selected by an approved diagnostic recommendation.

The complete operating procedure is controlled separately and must be obtained from the permanent Procedures page.

- Do not infer a standalone or combination procedure from this TDS.
- Use only the procedure selected for the diagnosed cooling-system condition.
- Do not mix HDF with another product unless the selected published procedure specifically requires the combination.
- HDF pairs only with RRF or PO4FIX in approved combination procedures.
- HDF is never combined with PMF.

TRANSPORTATION AND REGULATORY PROFILE

Mode / Field	Controlled value
DOT	NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIALS
IATA	NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIALS
IMDG	NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIALS
CERCLA RQ	No reportable quantity identified in the current SDS
California Proposition 65	Current SDS states this product does not contain Proposition 65 chemicals.

DOCUMENT CONTROL

Product	HDF Heavy Duty Flush
Product code	HDF
Safety source	SDS_HDF.pdf SDS UC-009 revision January 20, 2026 Version 1
Operational source	HDF_TDS.PDF Revision 1, August 4, 2026
Shipping source	2026 Ultimate Chemicals Product Shipping Specs Matrix.xlsx
NFPA asset	NFPA_1-0-0.svg
GHS	Text-only hazard communication; no pictogram required
Header artwork	Approved Ultimate Chemicals logo upper left; MASTER_PRODUCT_LOGO_HDF_TRANSPARENT.png upper right
Program/footer artwork	Approved Zero Hour Certified Cooling System badge
Procedures URL	https://ultimatechemicals.com/pages/steps



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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