

CLEAR-FLUSH™

A/C FLUSHING SOLUTION

Flush A/C System Evaporators, Condensers & Lines



For use as taught by
U.S. Patent 5,174,906

ORDER INFORMATION

PART #	DESCRIPTION
B33801	6 X 1 GALLON (3.78 L) METAL CONTAINERS CLEAR-FLUSH
B33832	6 X 1 QUART (0.95 L) PLASTIC CONTAINERS CLEAR-FLUSH

ENVIRONMENTALLY RESPONSIBLE

CLEAR-FLUSH should be used in a closed loop system. However, in the event of a leak or spill, CLEAR-FLUSH contains no halogenated substances and has zero ozone depletion potential. All the ingredients in CLEAR-FLUSH are on the U.S. EPA SNAP list. CLEAR-FLUSH is made 100% from natural constituents all of which are renewable resources. On the other hand, ozone-depleting substances such as HCFC-141b are in the midst of phase-out in many countries.

- EXCELLENT CLEANING PROPERTIES AND COMPLETE EVAPORATION.
- THE PERFECT SUBSTITUTE FOR OZONE DEPLETING HCFC-141B.
- OEM TESTED AND APPROVED.
- OVER SEVEN YEARS OF FIELD-TESTING AND SHOP USE.
- COMPATIBLE WITH PAG, ESTER AND MINERAL OIL LUBRICANTS, CFC, HFC & HCFC REFRIGERANTS.
- QUICK AND EASY TO USE.
- ZERO OZONE DEPLETION POTENTIAL.
- ECONOMICAL.
- ALL INGREDIENTS SELECTED WITH HEALTH, SAFETY & ENVIRONMENTAL ISSUES IN MIND.
- INDEPENDENTLY LAB TESTED.
- NATIONWIDE DISPOSAL PROGRAM IN U.S.

OEM TESTED

Bright Solutions, Inc. spent over three years testing its flush product with the Climate Control Engineering Department of a major auto manufacturer before it was released for dealer use in both service and retrofit applications. OEM tests included the successful flushing of highly contaminated heat exchangers and a host of compatibility tests.

EXCELLENT CLEANING CAPABILITIES

CLEAR-FLUSH cleans superbly. CLEAR-FLUSH removes new or burnt lubricants from the internal surfaces of heat exchangers due to its low viscosity and high solubility with PAGs, esters and mineral oils. Its unique "wetting" action lifts surface particulates and other contaminants more effectively than HCFC or ester oil products.

COMPLETE SYSTEM COMPATIBILITY

The ingredients of CLEAR-FLUSH have been carefully selected and thoroughly tested by an independent laboratory to ensure that they do not harm the system compressor, hoses, gaskets, seals and other system components, even if traces remain after flush removal.

SAFE TO USE

From a health standpoint the product contains no hazardous ingredients. With a flash point of 104°F (40°C), a boiling point above 325°F (163°C), and an auto ignition temperature of 498°F (259°C), the product is well suited to meet industry demands for safe usage. As with all chemicals, keep clear of heat, flames and sparks during usage and follow all OSHA workplace regulations, exercise

common sense and follow instructions for removing product from the A/C components after flushing.

CAPABLE OF COMPLETE REMOVAL

High volatility is required to remove all the flush solution from the system after flushing. Failure to remove all the flush from a system means that the remaining flush will mix with the system lubricant. This is highly undesirable as this will alter the viscosity of the compressor lubricant. This can greatly reduce the compressor life of a system and increase warranty costs. Fortunately, due to its specially selected flash point, CLEAR-FLUSH can be removed completely from the system. High flash point materials with low volatility such as oil-based products cannot be totally removed from the system and therefore increase the risk of long-term compatibility problems.

ECONOMICAL

CLEAR-FLUSH is a service tool designed to clean contaminated systems at a fraction of the cost of replacement. It can dramatically reduce warranty costs and expenses associated with customer comebacks. This preventive use vastly increases the benefits of using "cures" such as filters.

COMPARISON CHART FLUSHING AGENTS FOR A/C SYSTEM HEAT EXCHANGERS

	Clear-Flush Solution	HCFC-141b Solvent	Low Viscosity Ester Formulas
Ozone Depletion Potential	NONE	YES	NONE
Cleaning Capability	Excellent	Excellent*	Poor to None
Ability to Evaporate	Excellent**	Excellent	Poor to None
Effect of Viscosity Spec of A/C System lubricant	NONE**	NONE	YES***
Auto OEM Approval	YES	NO	NO
Tested for A/C System Compatibility By A Recognized Independent Testing Lab	YES	Ask to see total independent lab test results	Ask to see total independent lab test results
Nationwide Disposal Program	YES	NONE	NONE

* Only if the HCFC-141b evaporates slowly enough to allow penetration and lifting of contaminated or burnt lubricant off the walls of the heat exchanger.

** Must use DRY shop air or dry nitrogen to purge and evaporate flush from heat exchanger and follow recommended flushing procedures for equipment being used.

***Based on inability to evaporate flush agent from fin-plate evaporator after 30 minutes of dry air purge. 1 to 2 ounces of low viscosity flush agent remained in evaporator after dry air purge. This amount of low viscosity flush agent remaining in an A/C system with an 8-ounce oil capacity would significantly lower the viscosity of the system lubricant. A reduction in system lubricant viscosity will reduce compressor life.

For our full line of products and our distribution programs please contact us at:

Note: actual products may vary from photos shown in this brochure.



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