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Can I use air brake antifreeze as an a/c flush chemical? It supposedly has good cleaning properties and quick evaporation.

Answer:

No. Alcohol is incompatible with the seal materials commonly used in a/c systems. It also can produce aluminum oxide (corrosion), and any alcohol remaining in the system could aid in the formation of acids. Thanks to Karl Matis, HECAT, Inc. for that short answer.

The longer answer is as follows.

To better understand the issues with fast-evaporating agents, think of a metal surface that needs painting. Prior to painting you need an absolutely clean surface in order for the paint to adhere properly.

It may seem that solvents such as gasoline or alcohol will work to clean off caked on grease, oil, and dirt. Unfortunately, they evaporate too quickly to complete the cleaning job. The thinner layer of caked on dirt and oil that they leave behind will have a harder surface and be much more difficult to remove.

For removal of a hardened sludge, you need a solvent that has good penetrating properties AND does not evaporate quickly.

The problem is not limited to alcohol and gasoline. Most solvents as they evaporate leave behind some chemicals. When new liquid refrigerant contacts this dried "solvent residue" it mixes with the refrigerant, which creates contamination problems.



A flush system that features adequate volume, velocity, and powerful agitation (such as offered by Hecat's pulse flush technology) is required to clean today's complex circuits. The wrong choice of flush chemical however, will leave solvent residue which no equipment can remove. A solvent flush material that is designed specifically for a/c system cleaning (such as Hecat Safe-Flush A/C) is recommended.



A/C system manufacturers specify what materials and processes are safe to use for cleaning after repairs. Manufacturer-approved products and processes help avoid corrosion, acid formation, degradation of seals, and other problems caused by leaving the wrong chemicals in an a/c system.

Follow the manufacturer's recommended chemical purge process, and always inspect to verify that you have removed the debris, waste oils, and solvent residue. Then you can paint yourself a pretty profit picture.



Heat Exchanger Cleaning & Applied Technologies

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