



GREEN Technology

U.S. Refrigeration Technologies, Inc.

phone = 1-800-593-7790; fax = 1-866-390-1356; info@usrefrigerationtech.com

> Two common customer concerns:

Does IceCOLD® technology void any warranties?

The Federal Trade Commission Magnuson-Moss Act 15USC ss230, January 1, 1997; 61 FR 69366, states that *a manufacturer cannot void or refuse to honor equipment warranty based on the fact that an second party non-OEM component was used on their equipment*. They *must* prove that the non-OEM component itself damages their equipment and say so in their warranty.

<http://www.ftc.gov/bcp/edu/pubs/business/adv/bus01.shtm>

No AC or refrigeration equipment manufacturer or HVAC contractor or technician has ever proven or even claimed damage to their equipment by the addition of IceCOLD® engineered synthetic catalyst.

To date, *no* AC / refrigeration equipment manufacturer or HVAC contractor or technician has stated that IceCOLD® will damage their equipment or void their warranties.

US Refrigeration Technologies holds a \$2,000,000 / \$4,000,000 insurance policy that will pay to replace any damaged equipment if the IceCOLD® engineered catalyst damages your equipment, whether it is in warranty or not. York has tested IceCOLD® and found it improved the efficiency by 28% and made the compressors run 40 degrees cooler which can add from 20% to 50% to the life of the compressor. Keep in mind that 80+% of an AC manufacturers business is replacement equipment and only 20% new construction.

USRT asked INTERTEK (they do the official SEER testing for the AC equipment manufacturers) what kind of testing HVAC contractors would like to see to assure them that IceCOLD® is safe, non hazardous and compatible with refrigerants and compressor oils. They suggested the SAE testing. The SAE is the world's definitive body on lubrication and oils. The INTERTEK laboratory SAE testing shows that IceCOLD is non toxic, non hazardous, no disposal problems and is compatible with refrigerants and compressor oils in addition to stating that the lubricity of the compressor oil was improved by 54% after IceCOLD® was added to the compressor oil.

IceCOLD® catalyst **meets or exceeds** all equipment manufacturers' warranty standards for compressor oil (independent laboratory testing by INTERTEK and by Idimetsu, one of the world's largest manufacturers of compressor oils).

Please do not hesitate to call your customer representative if I can answer any other questions concerning IceCOLD® engineered synthetic catalyst.

Maintenance and wear factors:

1) Besides the two synthetic active catalysts in IceCOLD®, one which removes the ASHRAE oil-fouling plaque, and the other that causes the refrigerant to evaporate at a lower temperature, IceCOLD® has advanced lubricity agent generations ahead of PAO synthetic oils such as Mobil 1:

- Leading-edge synthetic lubricity compound – to extend bearing life (INTERTEK certified laboratory testing shows 54% increased lubricity)

2) After treatment with IceCOLD® catalyst, we typically see a 1% to 6% decrease in compressor amperage draw. Typical reductions of compressor head temperature of 40 degrees *f* are common.

GE says that for every ~10% less amperage a compressor uses, lowers its operating temperature 10 degrees C.

GE also says that for every 10 degrees C lower temperature of operation, will double the compressor motor life.

Since IceCOLD® lowers amperage ~5%, then the compressor must be running 5 degrees C cooler, which according to GE, will increase compressor life by ~50%.

3) **Restoration of older Systems:** IceCOLD® catalyst will literally clean and restore older systems of the ASHRAE oil fouling. All of the components of IceCOLD® will help extend equipment life and reduce maintenance costs.

4) IceCOLD® **meets or exceeds** all equipment manufacturers' warranty standards for compressor oil (independent laboratory testing by INTERTEK and Idimetsu, one of the largest manufacturers of compressor oils).

5) Typical compressor oil will go up to 50% longer between oil changes after treatment with IceCOLD® due to less operation time, cooler operation, and lubricity compounds that extend oil life. Customers are encouraged to have oil tested before changing, as they will find it is not required as often as pre treatment. This is a "hidden savings".

6) Since the AC system cools the space off faster after IceCOLD® installation, the equipment runs up to 20% less (which is how you save electricity cost); since it is running 20% less, all your normal annual maintenance costs are reduced 20%; costs from changing air filters to coil cleaning, to normal wear of components such as contactors, parts, labor, etc.

Your equipment runs 20% less hours per year, it lasts ~20% longer.

Customers are reminded that instead of changing air filters every 4 weeks, for instance, they now can go 5 weeks. All regular maintenance is extended since the unit will run 20% less. Including end of life replacements. Which is why the equipment manufacturers and AC contractors do not recommend IceCOLD® as it decreases their new equipment and parts sales revenue.