

TECHNICAL BULLETIN

Avoiding Low-Quality Manufacturers – Trust the Brands You Know

November 7, 2018 – Over a 9-month period, Chemours purchased five discrete 25-lb. DACs of competing R-410A that are commercially available in the US market. The cylinders were then sampled and analyzed under AHRI 700 testing conditions. Alarming, 4 out of 5 of these cylinders, that are labeled as “meeting industry standards”, failed to meet the AHRI 700 specifications for blend composition, moisture, and non-condensables.

Competitor Samples of R-410A							
AHRI Specification			Sample #1	Sample #2	Sample #3	Sample #4	Sample #5
<i>BLEND CHARACTERISTICS</i>							
Allowable Composition	% by weight	R-32 / R-125	R-32 / R-125	R-32 / R-125	R-32 / R-125	R-32 / R-125	R-32 / R-125
		48.5 - 50.5 / 49.5 - 51.5	43.58 / 56.42	49.99 / 50.01	50.1 / 49.9	50.91 / 49.09	49.3 / 50.7
<i>CONTAMINANTS</i>							
Air and Other Non-condensables	% by volume @ 25.0°C	< 1.5	1.43	3.06	2.1	0.86	1.2
Moisture	ppm by weight	< 10	4.6	11.7	7.2	5.1	6

In a related investigation, several 24-lb. and 25-lb. DACs of competitor R-404A and R-407C were also shown to contain low-quality mixtures that could cause financial and reputational harm.

Bad composition, non-condensables, and high moisture may lead to:

- Flammability under leak conditions
- Increased discharge temperature
- Damage to the compressor and metering device
- Poor cooling capacity
- Decreased system energy efficiency

Protect your business by avoiding manufacturers that do not meet AHRI 700 purity standards. Trust the brands you know; Freon™ and Opteon™ Refrigerants.

Print and share this message to warn customers about the harmful effects of buying untrustworthy refrigerant – you and your customers’ reputations may depend on it.

For more information on Chemours and ICOR products, visit: refrigerants.chemours.com