It is time to put an end to counterfeits. The consumption of HCFC and HFC gases is prohibited.

Materials fraudulent cylinders can contain:
• Any blend of gases, including hydrocarbons
• Blends of recovered refrigerants - blend of hydrocarbons
• Refrigerant R-415B: HCFC-22/HFC-152a (25%/75%)

If possible, test the refrigerant:
Check the cylinder: UN number, CAS number, ASHRAE number, general appearance, color, labels and specifications:
• Blend of R-134a - R-40; expanded R-134a; any other blend
• Refrigerant R-415B: HCFC-22/HFC-152a (25%/75%)

General appearance of cylinders:
• Dupont is not DuPont™
• Genatron is not Genetron®
• Anywell is not Honeywell
• BA, B, C indicates blends (R-404A, R-410B, R-407C)
• Labelling - upper or lower case
• R-404A is orange - 410A is rose - R-134 is light blue

Counterfeit refrigerant cylinders could contain:
• Any blend of gases, including hydrocarbons
• Blends of recovered refrigerants - blend of hydrocarbons
• Refrigerant R-415B: HCFC-22/HFC-152a (25%/75%)

Mistaken advertisements:
Report the counterfeit refrigerants / supplier to the relevant authorities, including enforcement agencies, refrigeration technicians association, public awareness, spread the word.

Do not accept counterfeit: no demand, no offer! www.unido.org/MontrealProtocol

• Blends of R-134a - R-40; expanded R-134a; any other blend
• Refrigerant R-415B: HCFC-22/HFC-152a (25%/75%)

Language guidelines:
*AHRI guidelines N2014: shall follow AHRI guidelines*
WHY ARE THEY SO WIDELY AVAILABLE?

- Difficult to verify the authenticity
- Lack of awareness
- Difficult to track and prosecute
- Good business: low investment, high profit

New refrigerant recovered refrigerants

- Mixture of potentially fatal/corrosive gases
- Can be released into the atmosphere by malfunctioning equipment contributing to global warming and ozone depletion
- Can be toxic
- Can be flammable
- Can be explosive
- Can be explosive
- Can be toxic
- Can be flammable

CONSEQUENCES OF COUNTERFEIT REFRIGERANTS

- Air-conditioning, heating, and refrigeration equipment is counterfeit
- Refrigerant used is counterfeit
- Equipment producers unaware that the equipment is counterfeit
- Can cause health impact e.g. skin cancer, eye cataracts
- Increased cost of repair and maintenance
- Reduced lifespan
- Unreliable, the job may have to be repeated
- Increased cost of repair and maintenance
- Reduced lifespan
- Unreliable, the job may have to be repeated

HOW TO RECOGNIZE GENUINE REFRIGERANTS

- Do not store in a wet or corrosive environment.
- Do not reuse or use for any purpose.
- Refrigerant 134a
- Freon R-134a
- AC1-R-22 original - Results: 5.3 amp; efficiency 8.96 BTU/h.
- Brand new 12,000 BTU split ACs and 5.9 amp. were compared as follows:

- Gas-liquid mixture
- Inefficient
- High cost
- Additional services may be required
- Reduced lifespan
- Unreliable, the job may have to be repeated
- Increased cost of repair and maintenance
- Reduced lifespan
- Unreliable, the job may have to be repeated

Methyl Chloride or Chloromethane (CM). Colourless, sweet smell, toxic and flammable gas.

ASHP** - Refrigerant

R-40 (Not a refrigerant): Methyl Chloride or Chloromethane (CM). Colourless, sweet smell, toxic and flammable gas.

The characteristics of R-40*

- Expanded in volume when heated
- Pure refrigerants

How to recognize genuine refrigerants

<table>
<thead>
<tr>
<th>Chemical Container Colour Refrigerant Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHRI** – Refrigerant Identifier</td>
</tr>
<tr>
<td>United States</td>
</tr>
<tr>
<td>CAS Number</td>
</tr>
<tr>
<td>United States</td>
</tr>
</tbody>
</table>

The name of the manufacturer and the country of origin should be printed directly on the refrigerant container.