

Automotive Technology 7th Edition
Chapter 64: Refrigerants and Refrigerant Oils
Matching Quiz

Name: _____ Date: _____

Matching: Choose the item in column 2 that best matches each item in column 1.

- | | | |
|-----------------------------------|--|-----------|
| 1. CFC-12 | A. A colorless and odorless gas that operates at extremely high pressure, 7 to 10 times that of an R-134a system. | 1. _____ |
| 2. HFC-134a | B. The first refrigerant used in automotive A/C systems, commonly referred to as R-12 or Freon. | 2. _____ |
| 3. HFO-1234yf | C. A refrigerant that is less harmful to the atmosphere, widely used starting in the early 1990s. | 3. _____ |
| 4. R-744 (CO ₂) | D. The refrigerant required in all recent vehicles starting in the mid-2010s, with a lower impact on climate change. | 4. _____ |
| 5. Ozone Layer | E. A measure that compares the ability of different gases to trap heat. | 5. _____ |
| 6. Global Warming Potential (GWP) | F. A layer in the stratosphere that blocks ultraviolet wavelengths of light from the sun. | 6. _____ |
| 7. Non-condensable Gas (NCG) | G. Any gas that does not condense under normal compression refrigeration conditions. | 7. _____ |
| 8. PAG oil | H. The type of refrigerant oil typically used in R-12 systems. | 8. _____ |
| 9. Mineral oil | I. Refers to oils like PAG or ester that can absorb moisture directly from the air. | 9. _____ |
| 10. Hygroscopic | J. The type of refrigerant oil used in most R-134a systems. | 10. _____ |

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Answer Key

Answer Key:

1. B
2. C
3. D
4. A
5. F
6. E
7. G
8. J
9. H
10. I