EPA SECTION 608 CORE (2022 revision)

What does ozone in the stratosphere above the earth consist of?
a. Molecules containing 2 oxygen atoms.
b. Molecules containing 3 oxygen atoms.
c. Molecules containing 4 oxygen atoms.
d. Molecules containing 5 oxygen atoms - b. Molecules containing 3 oxygen atoms.

Which of the following refrigerants has the lowest global warming potential?
a. R-134a
b. R-407C
c. R-410A
d. R-600a - d. R-600a

Which of the following gases is used as the baseline measurement for global warming potential?
a. Ammonia
b. Carbon Dioxide
c. CFC-12
d. Propane - b. Carbon Dioxide

Which type of refrigerant typically has the lowest global warming potential?
a. HCFCs
b. HFOs
c. HFCs
d. All are equal - b. HFOs

What is the state of refrigerant entering the compressor of a refrigeration system?
a. Low pressure subcooled liquid
b. Low pressure superheated vapor
c. High pressure subcooled liquid
d. High pressure subcooled vapor - b. Low pressure superheated vapor

How does the global warming potential of R-410A compare to that of carbon dioxide?
a. It is lower.
b. They are equal.
c. It is hundreds of times greater.
d. It is thousands of times greater. - d. It is thousands of times greater.

How do the global warming potentials of isobutane (R-600a), propane (R-290), and R-441A compare to the GWPs of HFC-134a, R404A, and R-410A?

a. They are significantly higher.
b. They are significantly lower.
c. They are approximately equal
d. They are slightly higher. - b. They are significantly lower.

What are the characteristics of hydrofluoroolefins (HFOs)?
a. Non-ozone depleting and have high global warming potentials.
b. Non-ozone depleting and have low global warming potentials.
c. Ozone depleting and have high global warming potentials.
d. Ozone depleting and have low global warming potentials. - b. Non-ozone depleting and have low global
warming potentials.

Why are HFO refrigerants less flammable than
hydrocarbon refrigerants?
a. They contain chlorine.
b. They contain bromine.
c. They contain fluorine.
d. They contain carbon. - c. They contain fluorine.

Which of the following refrigerants is an HFO?
a. R-1234yf
b. R-123
c. R-134a
d. All three are HFOs - a. R-1234yf

What characteristics of HFC refrigerants make them damaging to the environment?
a. They are toxic to plants and animals at low doses.
b. They contain chlorine which damages the ozone layer.
c. They have high Ozone Depletion Potential (ODP)
d. They can have very high global warming potentials. - d. They can have very high global warming
potentials.

Why are some of the hydrofluoroolefins classified as A2L?
a. They have toxicity characteristics.
b. They are less flammable than hydrocarbon refrigerants, but most are still mildly flammable.
c. They are prohibited for use in the U.S.
d. They have ozone depleting potentials and have
low global warming potentials. - b. They are less flammable than hydrocarbon refrigerants, but most are still mildly flammable.

How many ozone molecules can each chlorine atom in the stratosphere destroy?

a. 1,000 molecules
b. 100,000 molecules
c. 100,000,000 molecules
d. None. Chlorine is not the element in refrigerant that harms ozone. - b. 100,000 molecules

An example of a CFC refrigerant is:
a. R-134a
b. R-123
c. R-22
d. R-12 - d. R-12

Which of the following is a HFC refrigerant?
a. R-134a
b. R-115
c. R-22
d. R-11 - a. R-134a

Which of the following is a high-pressure refrigerant
under EPA's section 608 regulations?
a. R-410A
b. R-113
c. R-123
d. R-11 - a. R-410A

Which of these gases help form the earth's protective shield?
a. Methane
b. Radon
c. Stratospheric Ozone
d. Carbon Dioxide - c. Stratospheric Ozone

HCFC refrigerants contain which of the following?
a. Helium, Carbon, Fluorine, & Chlorine
b. Hydrogen, Chlorine, Ferrite, & Carbon
c. Hydrogen, Chlorine, Fluorine, &Carbon
d. Hydrogen, Chlorine, Fluorine, & Calcium - c. Hydrogen, Chlorine, Fluorine, & Carbon

Which of the following refrigerants damages stratospheric ozone?
a. HFOs
b. HFCs
c. HCFCs
d. Ammonia - c. HCFCs

What is the strongest evidence that HCFCs are in the stratosphere?