TCFP FF1/ FF2 (Latest 2023/ 2024) Test Review | Complete with Questions and Verified Answers| 100% Correct

Q: What happens if a vapor has a density value LESS than 1?

Answer:
The vapor is lighter than air and will rise.

(Ex. Hydrogen Gas)

Q: What happens if the vapor has a density value EQUAL to 1?

Answer:
The vapor is the same weight as air and would mix with the air easily.

(Ex. Carbon Monoxide)

Q: Why is in helpful for firefighters to have a good understanding of a substance's vapor density?

Answer:
They may be able to predict the spread or migration of the vapors and possibly remove any ignition sources that may be in the vapor's path.

Q: The ratio of the density of a liquid or solid, as compared to the density of an equal volume of water, with water having an assigned value of 1 is called?

Answer:
Specific Gravity

Q: What happens when a liquid or solid has a Specific Gravity higher than 1?

Answer:
The liquid or solid is heavier than the water and will sink.

(Ex. Carbon Disulfide)

Q: What happens when a liquid or solid has a Specific Gravity lower than 1?

Answer:
The liquid or solid is lighter than the water and will float.

(Ex. Gasoline, Kerosene, and Wood)

Q: What is the danger of using water on a flammable liquid with a low specific gravity?

Answer:
The water may actually spread the liquid and the fire rather than putting the fire out.

Q: The degree of rapidity with which a substance evaporates to a gaseous state is called?

Answer:
Volatility

Q: The lowest temperature at which a substance begins to release ignitable vapors sufficiently fast enough to "flash" when exposed to an outside ignition source but DOES NOT CONTINUE TO BURN is called?

Answer:
The Flash Point

Q: True or False: Anything that can burn has a flash point.

Answer:
True

Q: The flash point of a substance we usually call "flammable," such as gasoline, is much _____ than the flash point of a substance we wouldn't call flammable, such as steel.

Answer:
Lower

Q: What are the 3 steps taken to determine the flash point of a substance?

Answer:
Step 1: Ensure that the pressure and oxygen content of the atmosphere are constant and that the substance being tested is pure.

Step 2: Beginning at a very cold temperature, the substance is heated very slowly and begins to produce vapors.

Step 3: The Vapors are given an external ignition source (a test flame, for example) and the temperature at which these vapors flash or burn is considered the flash point.

Q: Flash Point determines the _____ of all liquids and solids.

Answer:
Flammability

Q: The LOWEST temperature at which a substance produces ignitable vapors sufficiently fast enough to "flash" when exposed to an outside ignition source and then CONTINUES TO BURN is called _____.

Answer:
The Fire Point

Q: The process of initiating self-sustained combustion

Answer:
Ignition

Q: Combustion is a _____ reaction.

Answer:
Chemical

Q: What are the two ways a substance can reach its ignition temperature?

Answer:
(1) Piloted Ignition
(2) Auto-Ignition

Q: The introduction of an EXTERNAL ignition source like a spark, match or open flame is called?

Answer:
Piloted Ignition