
Q341 - Deck Safety

1. How should gasoline tanks be filled?

- To the top to expel all vapors from the tanks
- Fill with only sufficient fuel for the planned trip so excess gasoline is not carried
- **Fill to near the top with some space allowed for gasoline expansion**
- To the top so the operator is certain how much fuel he has aboard

Note:
Gasoline tanks should be filled nearly full, leaving space for expansion to prevent spills and vapor hazards. Filling to the top eliminates this space, creating a fire and pollution risk. Carrying only the necessary fuel is unsafe without a reserve, and knowing the exact fuel level does not justify overfilling.

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2. How does good housekeeping prevent fires on a vessel?

- Allowing better access in an emergency
- Improving personnel qualifications
- **Eliminating potential fuel sources**
- Eliminating trip hazards

Note:
Good housekeeping prevents fires by eliminating potential fuel sources, directly addressing the 'fuel' component of the fire triangle. Fire prevention focuses on controlling fuel and ignition sources, and good housekeeping practices like cleaning spills and properly storing combustibles reduce the risk of fire ignition or spread. Options related to emergency access, personnel qualifications, and trip hazards address safety and response, not primary fire prevention.

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3. Which visual distress signal is acceptable for daylight use only?

- Hand-held red flare
- Red aerial pyrotechnic flare
- Self-contained rocket-propelled parachute red flare
- **Hand-held orange smoke distress flare**

Note:
Hand-held orange smoke distress flares are approved for daylight use only, unlike red flares which are designed for nighttime or dual-use applications. Coast Guard regulations categorize visual distress signals as day, night, or dual-use, with orange smoke specifically designated for daytime visibility due to its effectiveness in sunlight and ineffectiveness at night.

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4. Each distress signal and self-activated smoke signal must be replaced not later than the marked date of expiration, or not more than how many months from the date of manufacture?

- 30 months
- 36 months
- **42 months**
- 48 months

Note:
Distress and self-activating smoke signals must be replaced no later than their expiration date or within 42 months of the date of manufacture, whichever is earlier.

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5. Which of the conditions listed is necessary for a substance to burn?

- The temperature of the substance must be equal to or above its fire point
- The mixture of vapors with air must be between the LEL and the UEL
- The air must contain oxygen in sufficient quantity
- **All of the above**

Note:
Combustion requires sufficient heat to reach the fire point, a vapor/air mixture within the explosive limits (LEL and UEL), and adequate oxygen. Therefore, all listed conditions are necessary for a substance to burn.

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6. A definite advantage in the use of water as a fire extinguishing agent is its ability to _____.

- alternate expansion and contraction as water in liquid state becomes vapor
- absorb smoke and gases as water is converted from liquid to vapor
- **vaporize and rapidly expand as water absorbs heat**
- rapidly contract as water is converted from a liquid to a vapor

Note:
Water extinguishes fires primarily by absorbing heat and rapidly expanding as steam, which cools the burning material and displaces oxygen.

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7. Foam is a very effective smothering agent and _____.

- works well on extinguishing electrical fires
- **it provides cooling as a secondary effect**
- can be used to combat combustible metal fires
- All of the above

Note:
Foam primarily smothers fires and, due to its water content, provides cooling as a secondary effect.

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8. When compared to low-expansion foam, a high-expansion foam will _____.

- be heavier
- **be drier**
- not cling to vertical surfaces
- be more heat resistant

Note:
High-expansion foam contains more air and less water per volume than low-expansion foam, resulting in a drier foam.

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9. When must a dry chemical fire extinguisher be recharged?

- **After each use**
- When the air temperature exceeds 90°F
- Every 6 months
- Every 12 months

Note:
Dry chemical fire extinguishers must be recharged after each use to maintain their rated capacity and ensure readiness for immediate use, as required by USCG regulations and manufacturer instructions. Discharge, even partial, compromises internal pressure and chemical quantity, rendering the extinguisher not fully serviceable. Temperature or calendar intervals are not primary recharge triggers; recharge is dictated by use or condition.

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10. In addition to weighing the cartridge, which other maintenance is required for a cartridge-operated dry chemical extinguisher?

- Check the external pressure gage.
- Weigh the powder in the canister.
- **Check the hose and nozzle for clogs.**
- Discharge a small amount to see that it works.

Note:
Cartridge-operated dry chemical extinguishers require hose and nozzle inspection for clogs in addition to cartridge weighing to ensure proper agent discharge.
