

Extinguishing Agent Exposures on Consumables

by J.R.Nerat

Kitchen cooking related fires have historically always been one of the leading fire source statistics. On a daily basis, the discharge of portable fire extinguishers and fire suppression systems installed within cooking areas routinely occurs in both commercial and residential types of occupancies. Various forms of consumable food and beverage, which are commonly present within the immediate area, will become either directly or indirectly exposed to these discharged extinguishing agents. As a result, questions on how to properly address and respond to such exposures are generated.

The most common extinguishing agent exposures are gas, liquid, and dry chemical agents. While most fire extinguishing agents are considered non-toxic and do not represent any unusual health exposure concerns, they are clearly not intended for human ingestion or consumption. The various manufacturing, handling, and storage conditions typically associated with fire extinguishing agents are also not sterile nor free from contaminants and potentially harmful bacteria which could be present and later become ingested.

Health department regulations associated with commercial kitchen operations typically



dictate and require all open consumables directly exposed to any form of contamination, such as fire extinguishing agents, be removed and discarded. Additional background information can be found on the USDA

(United States Department of Agriculture) food and safety inspection service website at www.fsis.usda.gov.

For these same health and safety reasons, most fire equipment manufacturers recommend any open or unpackaged food and beverage suspected of being directly exposed to any form of fire extinguishing agent be promptly removed and properly discarded. Kitchen food preparation surfaces, containers, and cooking utensils directly exposed to fire extinguishing agent residues should also be thoroughly washed and cleaned prior to reuse.

Should specific extinguishing agent information be requested to identify various material properties or address exposure and handling concerns, the manufacturer's extinguishing agent MSDS (Material Safety Data Sheet) should be consulted. ❖

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