

Developing Practical and Useful Content for SDS Section 5 (Firefighting measures)

Mike Snyder, Managing Director, Process Safety DEKRA North America

Presenter biography

Michael D. (Mike) Snyder serves as Managing Director DEKRA North American Process Safety, a trusted advisor in Chemical Process Safety testing and consulting services.

Mike was previously the Global Director of Safety and Loss Prevention for Dow Corning Corporation, responsible for leading the company's Occupational and Process Safety programs. He has also served in a variety of operational and leadership roles in the volunteer municipal fire service.

Mike currently serves on the Center for Chemical Process Safety (CCPS) Advisory Board, and is a former member of the NFPA Standards Council. He currently service as a Technical Committee member on three NFPA standards, including the Flammable & Combustible Liquids Code (NFPA 30) and Fire Code-Special Equipment, Processes, and Hazardous Materials (NFPA 1).

Mike obtained a bachelor's degree in Chemical Engineering from Cornell University, and a master's degree in Occupational Safety & Health from Columbia Southern University. He is a registered professional engineer in Michigan, a Certified Safety Professional, and a Certified Fire Protection Specialist (CFPS).



Presentation abstract

Section 5 (Firefighting Measures) of a GHS-compliant Safety Data Sheet must provide practical information to ensure the safe and effective control of fires that are caused by the material being studied. This information is relied upon by both facility occupants and emergency response personnel as part of emergency pre-planning and response.

While the creation of Section 5 content for many materials is common and straight-forward, challenges arise when the chemical and physical properties of a material create situations where traditional firefighting methods (such as dry chemical fire extinguishing agent, water spray, or firefighting foam) are not effective.

Sharing the perspective of both a chemical manufacturer and emergency responder, this presentation will overview:

- Common format and nomenclature for populating the Extinguishing Media, Special hazards arising from the substance or mixture, and Advice for firefighters SDS sections.
- Sources and methods that can be used for obtaining practical and relevant information to include in Section 5.
- Three Case Studies involving unique firefighting hazards, providing examples how useful Section 5 information where solutions applied to provide useful Section 5 information:
 - $\circ \quad \text{Water Reactive Materials} \\$
 - Pyrophoric Materials
 - o Unstable/Reactive Conditions Initiated by Contamination