Hand Protection for Pyrophorics

Pyrophoric chemicals ignite spontaneously when exposed to air. Whenever possible, pyrophoric materials should be handled in an enclosure such as a glove box with an inert atmosphere. When handling pyrophorics outside of an inert glove box, fire retardant gloves must be worn. This is not only prudent, but also mandated by Cal-OSHA which requires the selection of hand protection to be based on the recognized hazards.

Currently, EH&S recommends the Ansell Kevlar® Goldknit® Lightweight 70-200, (Figure 1) to all UCSF laboratories using pyrophorics. This glove meets flame resistant testing requirements and provides good dexterity for laboratory procedures.

Since the Kevlar® gloves can absorb hazardous liquids, a chemically resistant neoprene glove must be worn over the fire-retardant glove. Neoprene is recommended over nitrile since it is less combustible. Principal Investigators are responsible for ensuring their standard operating procedures for pyrophorics are updated to include use of these gloves and everyone in their laboratory is properly trained on proper glove use and care. Training must be documented. For questions, contact your EH&S Safety Specialist.

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