



# CHEMICAL SUIT GUIDELINES

## Important Factors to Consider When Selecting a Protective Clothing Ensemble for Specific Chemical Exposure.

**Chemical Hazards:** Chemicals present various hazards, including toxicity, corrosiveness, flammability, reactivity, and oxygen deficiency. The selection of ensemble components should meticulously address the specific hazards posed by the chemicals present. Refer to our Ranpro Chemical Guide to make appropriate selections.

**Physical Environment:** Chemical exposure can transpire in diverse physical environments, such as industrial settings, indoors, outdoors, extreme temperatures, and rugged terrains. The ensemble components should be chosen to accommodate these varying conditions effectively.

**Duration of Exposure:** Protective qualities of ensemble components may be contingent upon certain exposure levels. Therefore, the duration of exposure should factor into the selection process to ensure sustained protection throughout the entire exposure period.

### Procedure for Donning and Doffing PVC Chemical Suits:

#### Donning:

- ✓ Inspect the suit thoroughly for any damage or defects before use, including material, components, and seams.
- ✓ Put on chemical-resistant safety boots and tape the leg cuff over the tops of the boots with chemical-resistant tape.
- ✓ Don long-sleeved inner gloves (**reusable or disposable gloves\***).
  - For jacket without inner cuff: Then, don the over-glove (**suitable chemical-protective glove\***) over the inner glove and tape the over-glove cuff opening with the sleeve.
  - For jackets with inner cuff: For a secure fit, insert the gauntlet of the over-glove (**suitable chemical-protective glove\***) between the outer sleeve and the inner cuff of the chemical jacket. Then, tape the sleeve opening with the over-glove for an air-tight seal.
- ✓ If wearing the hood, secure it to the jacket, raise it over the head, and adjust it for satisfactory fit and comfort.

#### Doffing:

- ✓ Remove the over-gloves, if worn.
- ✓ Remove the hood, ensuring no contamination of the head/face.
- ✓ Remove the boots, taking care to avoid contaminating the suit.
- ✓ Remove the inner gloves, avoiding contamination of the suit.
- ✓ Remove the suit, ensuring no contamination of the inner surface.
- ✓ Perform a thorough decontamination of the suit and other equipment used before storing it for next use. Refer to the care label on the suit for washing instructions.

### Integration of Gloves with Chemical Protective Suits:

To integrate gloves with the sleeves of a chemical protective suit, follow these steps:

1. Ensure that the gloves are compatible with the chemical protective suit and provide the necessary level of protection against the specific hazards present.
2. Don long-sleeved inner gloves (**reusable or disposable gloves\***).
  - For jacket without inner cuff: Then, don the over-glove (**suitable chemical-protective glove\***) over the inner glove and tape the over-glove cuff opening with the sleeve.
  - For jackets with inner cuff: For a secure fit, insert the gauntlet of the over-glove (**suitable chemical-protective glove\***) between the outer sleeve and the inner cuff of the chemical jacket. Then, tape the sleeve opening with the over-glove for an air-tight seal.
3. When doffing the suit, remove the gloves carefully to prevent contamination of the inner surface of the suit. Proper removal of the gloves is essential to prevent potential exposure to hazardous substances.

By adhering to these guidelines, gloves can be effectively integrated with the sleeves of the chemical protective suit, ensuring comprehensive protection for the wearer during chemical handling activities.

**\*Appropriate chemical-resistant gloves, either reusable or disposable, that are certified for the type, concentration, and mix of chemicals being used for the duration of use and type of exposure and related permeation rates.**