Lakeland Type 3 & 4 Chemical Suits

Donning & Doffing Procedures

The following are instructions for donning and doffing of Lakeland ChemMAX or other Type 3 & 4 chemicals suits in order to minimise the risk of contamination. These instructions can apply to any similar suit. Both donning and especially doffing is easier and safer if assisted by a colleague. Do not try to remove a garment contaminated with chemicals without assistance.

Donning

1. Carefully open the Lakeland garment bag by tearing across the top from the small nick. Remove the garment from its bag and unfold carefully, ideally on a smooth surface; avoid rough surfaces that may scratch or damage the garment fabric.
2. Careful open the outer zip flap by unfastening the Velcro, inserting a finger behind the top and sliding the finger down to the bottom. Fully unzip the outer and then the inner zip.
3. In a sitting position remove shoes or boots. (Donning the overall with boots on risks damaging the suit unnecessarily).
4. Whilst sitting, open the garment and insert one leg after the other into the garment legs, carefully pulling the legs up over the feet. Once the legs are fully donned it is a good idea at this stage to replace shoes or boots.
5. For garments with attached feet / boot flaps the attached feet should slide into the chemical boot. (a woollen sock pulled over the feet can assist and add comfort if required). The boot flap is pulled over the outside of the chemical boot.
6. Stand and pull the garment up the body, placing each arm into a sleeve one after the other, and ensuring the garment is comfortably sitting on the shoulders.
   a. For garments with attached gloves ensure the hands are fitted into the gloves properly
   b. For garments with double cuffs: pull the outer sleeve back and seat the inner sleeve to the wrist; pull on the glove then pull the outer cuff over the gauntlet of the glove. This process will be much easier with assistance
7. From this point it is better to have a colleague assist and perform the remainder of the procedure. Pull the inner zip up about three quarters by holding the bottom of the zip with one hand and sliding the zip up with the other. Take care not to trap fabric in the zip. Further adjust the garment if required.
8. If a face mask is to be worn, don it now ensuring it is properly seated and comfortable. If an air supply is required as part of the mask switch it on or ensure breathing is normal if a filter mask is used.
9. Carefully pull the hood over the head, seating the elasticated edge to any face mask as required. Pull the inner zip up to the neck. Ensure the zip is fully closed. Ensure the hood edge is seated properly against the face mask or face as required.
10. Fold the inner flap into the flap housing and then slide the outer zip up carefully ensuring the inner flap folds back on itself and taking care not to trap the flap fabric in the zip. Slide the outer zip to the neck and ensure it is fully closed.
11. To fasten the outer flap:
   a. For Velcro versions: carefully attach the Velcro at the neck first and gradually press together down the garment ensuring there are no folds or gaps left in the Velcro join.
   b. For adhesive tape versions: carefully remove the backing of the tape on the flap from the top by peeling it down carefully. Ensure the exposed tape does not become damaged or dirty. Fasten
the tape at the top first by pulling the flap across the neck of the garment, then carefully press the tape into place all the way down, again ensuring there are no folds or creases.

12. Once the suit is donned and seated properly, make any final adjustments and conduct a further visual check to ensure the hood is suitably seated to face mask or face and that there are no tears or damages in the fabric or seams of the suit.

13. Finally, at this stage further sealing of the joins between parts of the PPE ensemble may be made – hood to face-mask; sleeve to glove; ankle to boot. This can be done by the use of a suitable chemical tape.

**Doffing**

*Lakeland chemical protective garments are designed to protect against splashes and sprays of chemicals. They are not intended for long term or extended exposure to chemicals and as such when contaminated during use should be removed as quickly as possible and disposed of accordingly. Any contaminated suit must be removed with the help of a qualified assistant. The assistant should be wearing suitable PPE subject to the chemical contaminant such as gloves, coverall, face mask etc. The key task is to ensure that any chemical on the outside of the suit does not come into contact with the wearer or the assistant.*

1. Heavily contaminated suits should be de-contaminated first by the use of a suitable method such as a decontamination shower.
2. The assistant should carefully remove the hood from the wearer, turning the hood inside out to prevent contamination contacting the wearers head. Any face mask can then be removed.
3. The assistant should then open the outer zip flap to expose the outer zip and using the zip pull slide the zipper down to the bottom.
4. The inner flap and zip can be opened in the same manner – ensuring the body of the garment is folded outwards and away from the wearer’s body in the process.
5. With wearer standing with arms slightly back, the assistant then stands behind the wearer and pulls the cuff of the garment over the wearer’s hands. He can then gently slide the shoulders off the body of the wearer, the wearer withdrawing his arms at the same time, again, turning the sleeves and body inside out in the process.
6. The body of the garment can then be removed back and down the legs of the wearer.
7. With the wearer sitting, any boots should be removed and the garment legs can be pulled over the wearer’s feet.
8. The contaminated suit should be folded inside out and placed in a suitable bag for disposal.

**Disposal**

*Lakeland garments are generally manufactured from polypropylene, polyethylene or similar polymers. There are no known hazards from incineration or from placement in landfill. Uncontaminated suits can therefor be disposed of in the normal manner depending on local laws and regulations.*

However contaminated suits must be disposed of in a manner suitable given consideration of the chemical contaminant. This will depend on the chemical itself and on local legal requirements. Companies will normally have their own procedures for disposal of chemical contaminated equipment.

For more information on Lakeland chemical suits, or on donning, doffing and disposal, please contact Lakeland at sales-lakeland.com