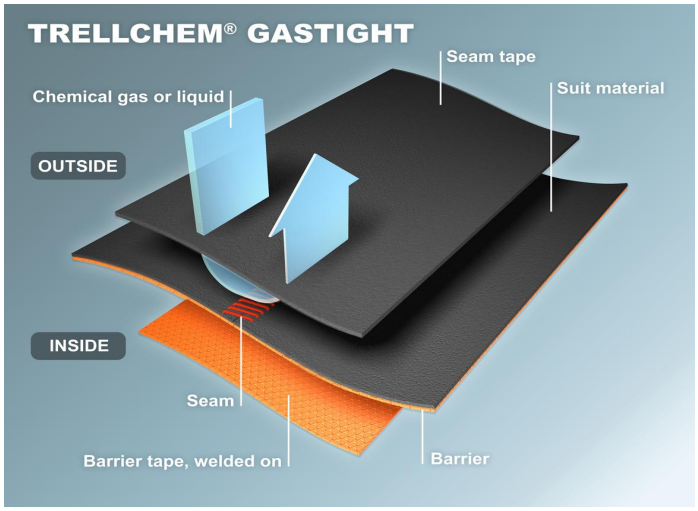
TRELLCHEM® Seam

Just as any join in a construction is a potential weak link, a seam in a chemical protective suit is too. But, TRELLCHEM® has developed a seam technology which prevents this weakness, creating a seam which is just as chemical resistant, and sometimes even better, than the garment material itself.

A gas-tight chemical protective suit is made up from large pieces of material which are joined by seams. In total there are several meter seams in a suit and these seams do propose a possible weak link in the construction, where chemicals can sneak through.

To prevent the seam from being a weak link TRELLCHEM® uses a unique seam technology based on stitching, taping and welding which altogether gives a seam with the same, and sometimes even better, chemical resistance as the garment material itself.

Looking at the scetch below, the most important part of the Trellchem® seam construction is the *welded on Barrier tape*. With this welded on Barrier tape, *the Barrier film becomes unbroken i.e. continuous all over the suit*, and thereby guarantees the same or even longer permeation times than the suit material itself. This seam technology is used on TRELLCHEM ® EVO, TRELLCHEM® VPS Flash and TRELLCHEM® VPS suits.



In a traditional seam, made on a material with the *Barrier film embedded* inside the material, it becomes *impossible to seal* it, thereby creating a weak spot in the seams where the chemicals can permeate. This explains the often shorter seam permeation times shown for these type of seams, compared with the suit material itself! See the scetch below.