



DOW CHEMICAL U.S.A.

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PERMEATION TESTING OF NITRILE - COATED COTTON GLOVE
(BEST NU-FANGLE #760/L760)

Permeation tests to compare protection against a mixture of carbon tetrachloride and perchloroethylene were conducted this month by the Louisiana Division Industrial Hygiene Group. The samples were tested by cutting a swatch from the palm of the glove so that no seams were involved, placing the samples in a test apparatus, covering the coated side of the material with 20/25 mls. of a 50:50 mixture of the solvents, and taking air samples from the chamber on the other side of the glove.

RESULTS

<u>Clothing Sample</u>	<u>Appropriate Time to Barrier Failure</u>
Nitrile - impregnated cotton glove (Best Nu-Fangle #760/L760)	40 Minutes
Vinyl - impregnated cotton glove (Best Bex VIP Standard #B60/LB60)	<20 Minutes
Cotton Glove	No Barrier

CONCLUSIONS

1. These gloves should not be considered as protection against chemicals because of their materials of construction and/or seams.
2. However, the nitrile-coated glove does offer some protection in the event of accidental chemical contact.
3. The wear characteristics and the greater suitability to a chemical plant atmosphere recommend the nitrile-impregnated glove as an excellent replacement for the cotton and vinyl-impregnated cotton gloves.

It is hoped that along with the new gloves, there will be new emphasis on proper use and choice of protective clothing.

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