

Immunological studies on workers exposed to occupational asthma associated  
substances: TDI (toluene diisocyanate) and  
MDI (diphenyl methane diisocyanate)

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- Abstract -

We prepared TDI-HSA (toluene diisocyanate-human serum albumin) and MDI-HSA (diphenyl methane diisocyanate-human serum albumin) to study isocyanate related occupational asthma. TDI-HSA and MDI-HSA were further purified by a column chromatography and dialysis, and characterized by UV spectrophotometer and electrophoresis. To analyze immunoglobulin subtypes (IgG, IgA, IgM) from isocyanate exposed workers, we developed a quantitative ELISA (enzyme linked immunosorbent assay) method. Using these

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antigens and method, 66 isocyanate exposed workers were screened for the presence of specific antibodies. No workers were found to have specific IgE and IgG in our studies.