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# Nitrile cleanroom gloves — Specification



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# Foreword

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This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (others than hoses).*

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# Introduction

Cleanroom synthetic gloves have been used in the critical environments of the electronic, disk drive, semiconductor as well as storage media industries, for the past 15 years. The quest for a cleaner glove, in new emerging industries of TFT, LCD, nanotechnology, bio medical applications, has ensured that this is a growing market. The industry use of cleanroom gloves is currently dominated by synthetic gloves, though, this wasn't the case, right up to the year 2000, wherein, latex gloves was the principle cleanroom available.

The basic function of cleanroom gloves is to ensure minimal transfer of contaminants onto the products or components being processed or manufactured in a clean environment. Such contaminants will always be present in the exposed hands of the personnel. It is for this purpose that the hands need to be gloved. However, such gloves need to have minimal contaminants on its surface, thus the need for the use of cleanroom gloves.

The principle contaminants that could compromise the quality or the integrity of the product or process in a critical environment are sub-micron particles, ionic chemical contaminants, non-volatile chemical components as well as silicone, amide or dioctyl phthalate (DOP). In the cleanroom industry, these parameters are known as particle count, ionic content, total non-volatile residue (TNVR) and silicone, amide or DOP content.

Depending on the criticality of the operational environment, the appropriate cleanroom glove is used. Hence, a very critical environment (Class 10 Clean Room) needs the usage of the cleanest glove, i.e. a class 10 cleanroom glove.