

## N95 RESPIRATORS



The National Institute for Occupational Safety and Health (NIOSH) has established a series of standards for testing and approving filter material to comply with federal regulations. See, 42 CFR Part 84, Subpart K, § 84.181 (Non-powered air-purifying particulate filter efficiency level determination). For N-series filters, the efficiency of the filter material is measured using a solid sodium chloride particulate aerosol. The manufacturer must pass the NIOSH testing protocols before obtaining approval and receiving a "testing and certification" (TC) number.

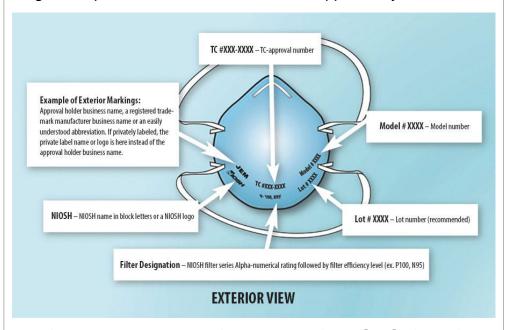
Filters are certified **N**, **R** or **P** according to their oil resistance and assigned a **95**, **99** or **100** according to their filter efficiency, *i.e.* the % of test particles of **0.3** microns (300 nanometers) or larger that they can block. A **N95** filter is certified to block at least 95% of such particles.

The **Federal Food & Drug Administration (FDA)**, in coordination with *NIOSH*, has additional approval requirements to confirm the biocompatibility of surgical masks, before they are labelled "N95 surgical respirators". 21 CFR 878.4040.



## What is a N95 Respirator?

In the U.S., under the definitions used by *NIOSH* and *OSHA*, each device depicted above is considered an "*N95*" respirator" - *if the filter material is certified and labelled "N95*". The two on the left are examples of a "filtering facepiece respirator" (FFR) and the two on the right are examples of "elastomeric respirators" that use cartridge filters. The center surgical mask is known as a "*N95*" *surgical respirator*" and involves additional approval by the FDA.



Use the camera on you cell phone to scan these QR Codes. The



one on the left will take you to a list of NIOSH approved respirators by manufacturer, the one on the right to a searchable database maintained by the CDC.

