

Removing road dirt and brake particulate from alloy wheels is one of many uses of cleaning cloths employing SIMWYPES technology. ➔



The SIMWYPES® technology is comprised of cleaning mediums for removing contamination from dry surfaces plus the method of making the mediums.

Originally created to remove residual amounts of acutely toxic beryllium oxide and beryllium particulate from dry, solid surfaces, SIMWYPES technology removes particulates so well that any contaminants that may remain on the cleaned surfaces are undetectable.

CHEMICAL

Features

- Employs discrete amounts of highly effective tackifier, ensuring that little or no residue is transferred to cleaned surfaces

Benefits

- Safe — employs a food-grade tackifier
- Conducive to environmental/occupational health — eliminates contaminants associated with particulate-induced diseases and ailments
- Effective — cleans on a nanoscale level
- Easy — involves wiping/rubbing rather than chemical burning or aggressive mechanical action associated with other methods of ultra cleaning
- Self-sufficient — requires no additional cleaning agent
- Versatile — contains active ingredient that can be employed to produce a variety of mediums (cloths, detector swabs, wipers, polishers, filters, tack mats, sponges, dry mops, etc.) for a variety of uses
- Economical — costs as little as a few cents per square foot of medium to employ

Applications

- U.S. Department of Energy and Department of Defense facilities
- Manufacturing facilities (aerospace, automotive, pharmaceutical, microelectronics)
- Clean rooms (maintenance requiring particle absorption/retention)
- Painting and assembly operations (air-purifying respirators, surface preparation/cleaning)
- Home cleaning
- Restoration

Patents & Awards

- U.S. Patent No. 8,337,626
- 2008 R&D 100 Award

Inventors

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Technology Readiness Level (1–9)



Actual application of the technology in its final form and in Y-12 production use.

Partnering Opportunities

Y-12 is seeking an industry partner to fully commercialize this technology.

**If you would like more information, please contact the
Office of Technology Commercialization and Partnerships:**

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<http://www.y12.doe.gov/technologies>