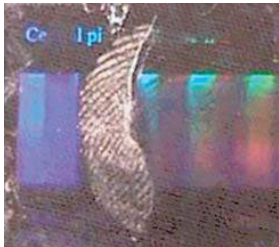
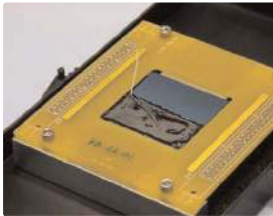


**Safe! Dries in minutes with no residue.
No outgassing. Space & UHV ready.**

Static sensitive CCD being cleaned with First Contact.



First Contact works beautifully on fused-silica phase masks, diffractive optics, nano and microfluidic structures.



DELUXE KIT: Applicator bottle, four refill bottles, peel tabs, sample mesh and string to embed and lift film.

How Clean?

"... no residue that produced scattering was found on a fresh silicon wafer when the polymer [First Contact] was applied and then stripped off"

— Bennett, J. et al., *Applied Optics*, 39(16), 2737,2001

"There was no residue after any of the first contact cleanings, as there was after the drag wiping on the previous optic."

— See for example: "First Contact Application and Removal Procedure" or "Drag Wiping with Methanol vs First Contact," Caltech/MIT LIGO Doc. E1000079_v5, T1000137_v3

"Once applied to an optic surface, it is expected that [First Contact Polymer] can be left on the surface indefinitely. The material is inert, and has no known chemical reaction with either the optic or the environment. Silicon wafers coated with the material were examined with ESCA and showed no trend of degradation or residue for up to 8 months. Studies were not continued beyond 8 months, but it is expected to be compatible indefinitely."

— Lockheed Materials Specification

How To Use:



Step 1:
Apply thickly.



Step 2:
Gently spread and let dry.



Step 3:
Start an edge and gently peel. That's it!

PHOTONIC CLEANING TECHNOLOGIES, LLC

1895 Short Lane, Bldgs 1 & 2
Platteville, WI 53818 USA
Tel: +1 608 467 5396
PhotonicCleaning.com



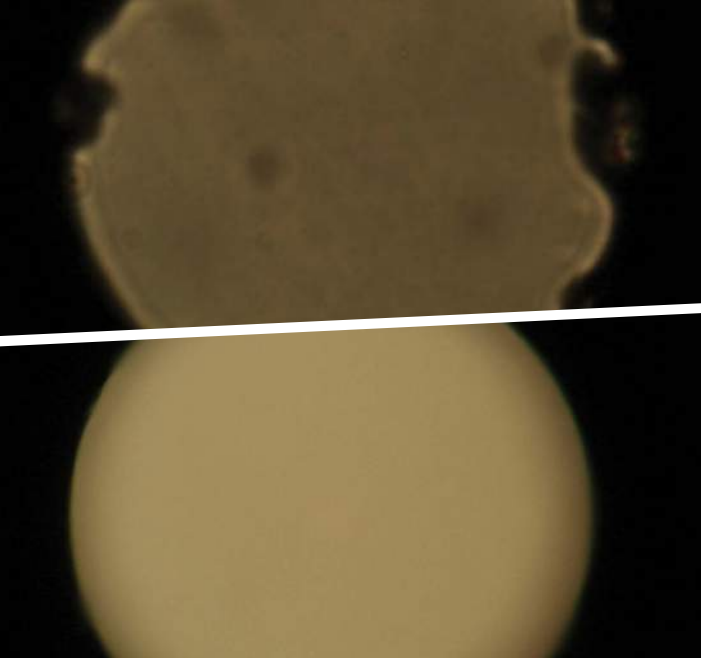
Send inquiries and PO's to sales@PhotonicCleaning.com



The Cleaning & Protection System

First Contact Polymer® liquid dries, peels and safely cleans telescope and laser optics as well as vacuum and aerospace surfaces. Use on mirrors, all glasses, metals, semiconductors, fused silica, Si, Ge, ZnSe, coatings, NaCl, high power laser optics and nonlinear optical crystals. No residue.

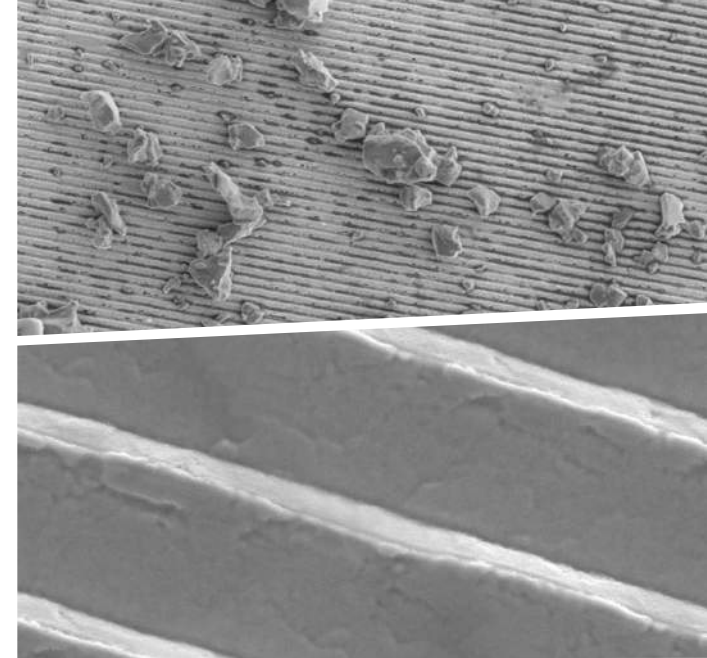




Before & after cleaning a 25um pinhole.



12 inch gold telescope spectrometer mirror restored to pristine condition in minutes.



Before & after (zoomed) cleaning. SEM images of a 300nm Aluminum diffraction grating grooves.

First Contact[®] is a safe, one-part, easy to use strip coating. It cleans and protects precision surfaces in use, during storage, assembly and in shipping. Leaving zero residue, **First Contact** goes on as a liquid, dries to a flexible, resilient film and peels off with low adhesion and no tearing. It's fast and easy to use.

Why FIRST CONTACT?

- **First Contact Solutions** consist of a blend of inert polymers in a blend of solvents carefully tuned so that the dried polymer peels with 1/10th the adhesion of scotch tape and minimizes thermal shock and stress to coatings.
- **First Contact** protects the precision surface when the film is left on, preventing scratching and becomes a barrier to water vapor as well as oxygen gas, corrosives and sulfur containing compounds. Protect your optics during installation and transportation. When ready to use, peel!
- **First Contact Polymer Solutions** come in a variety of colors as well as ESD free. Just choose the one that is best for your application.
- **First Contact** works beautifully on fused silica phase masks, diffractive optics, nano and microfluidic structures.

XPS	C 1s%	O 1s%	Si 2p %
After	17.8	57.4	20.6
Before	48.1	33.3	16.0

The table above shows XPS/ESCA data taken on a clean glass substrate before and after cleaning with Red First Contact Polymer. The amount of carbon decreases substantially after polymer removal-the surface is truly vacuum ready.

— Data taken at the Ulowa Central Microscopy Facility

Partial Customer List:

- Caltech, MIT, LIGO
- Lockheed Martin Missiles and Space
- Sandia ,Los Alamos, Argonne National Labs
- NASA, JPL & USAF
- Lawrence Livermore National Lab
- LLNL's National Ignition Facility
- Boeing, Raytheon, Corning, Philips
- KLA Tencor/Micron
- Zeiss, Jenoptik, Leica, Schott
- Coherent, Continuum, Spectra Physics
- European Southern Observatory
- BAE Systems, ITT Corp, Excelis
- Harvard University, Stanford University
- University of Arizona, University of Rochester
- University of Wisconsin-Madison
- CREOL
- Max Planck Institute fur Quantenoptik
- W.M Keck Observatory

Sales in 64 countries around the world!