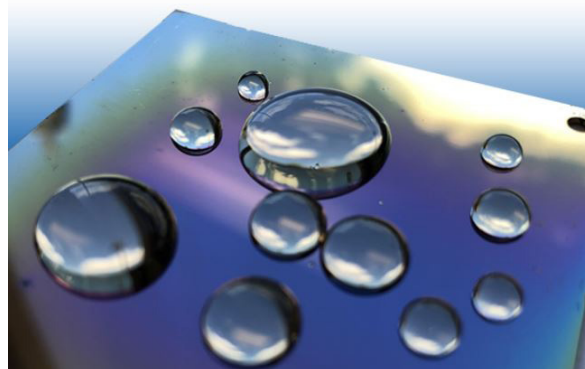


Notak[®]

SilcoTek's most non-stick surface treatment.

Overview

Notak[®] is SilcoTek's most hydrophobic and oleophobic surface treatment, using an organo fluoro surface functionalization of the substrate to drastically lower surface energy (patent info at www.silcotek.com/IP). Applied via chemical vapor deposition (CVD), the Notak[®] process directly enhances surfaces to resist unwanted build-up of water, oils, sticky hydrocarbons, and other foulants to improve performance.



Key Applications and Benefits

- Increase hydrophobicity and oleophobicity
- Improve mold release
- Prevent surface fouling
- Stable performance up to 300°C



Heat Exchangers



Research



Medical



Analytical

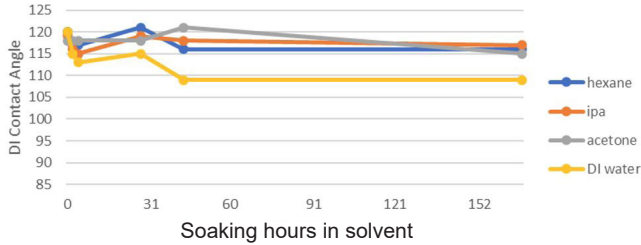
Notak[®] Properties

Coating Structure:	Direct molecular fluorination of base substrate
Deposition Process:	Thermal chemical vapor deposition (not plasma-enhanced)
Maximum Temperature:*	Max for functionalization: 300° C
Substrate:	Compatibility: Stainless steel, Aluminum, Brass Size: Up to 24"x17" maximum (60x43 cm) Geometry: Any shape, including complex geometries
Typical Thickness:	No measurable thickness - Up to 30 Angstroms
Hydrophobicity (contact angle):	Water: $\geq 118^\circ$ Hexadecane: $\geq 65^\circ$
pH Exposure:	Dependent on chemical exposure and substrate material.

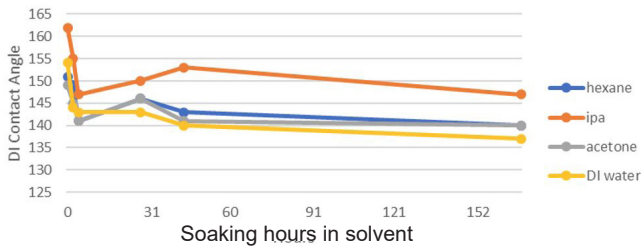
SOLVENT RESISTANT

When applied to 316L stainless steel and 6061 aluminum, the Notak® process shows excellent resistance over time to n-hexane, isopropyl alcohol, acetone, and DI (add) water

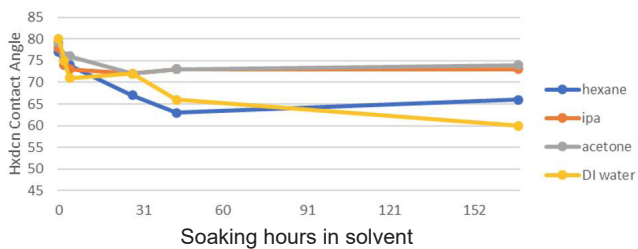
DI Water Contact Angles on Notak®
316SS (polished surface)



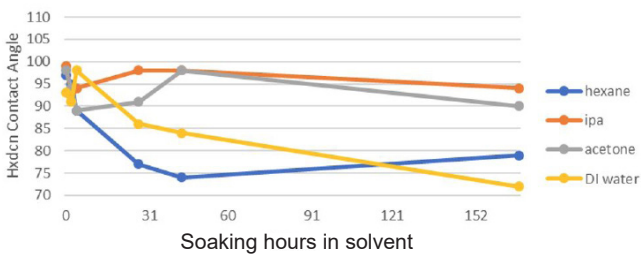
DI Water Contact Angles on Notak®
6061Al (polished surface)



Hexadecane Contact Angles on Notak®
316SS (polished surface)

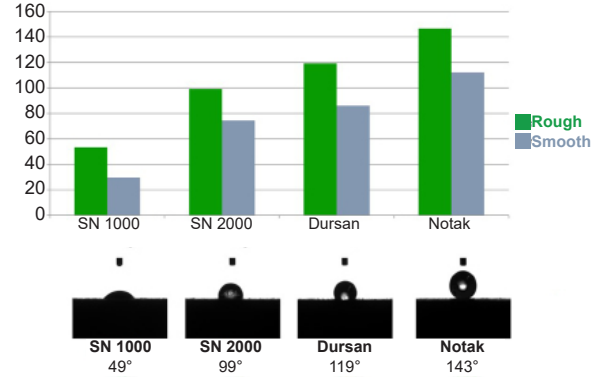


Hexadecane Contact Angles on Notak®
6061Al (polished surface)



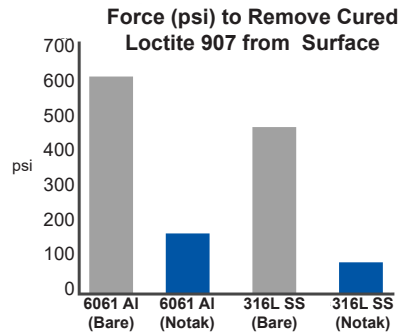
HYDROPHOBIC

Coatings produced by the Notak® process are hydrophobic, non-stick, and easy to clean.



EASY-RELEASE

Notak-treated surfaces show significantly better release to industrial-strength epoxy than untreated 316L stainless steel or 6061 aluminum





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*Notak® refers to the Notak® process, which is a thermal chemical vapor deposition process that we perform to enable your parts to have the properties identified above.