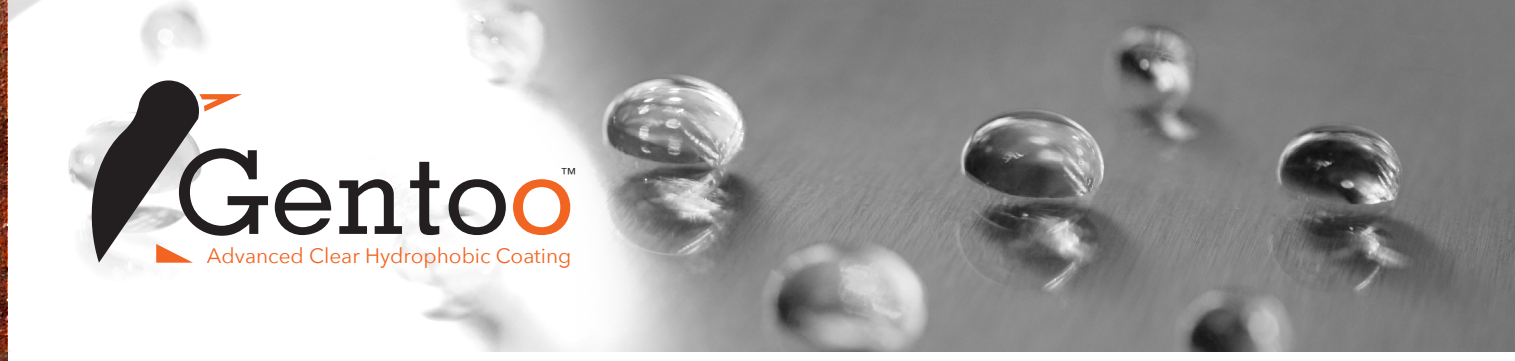


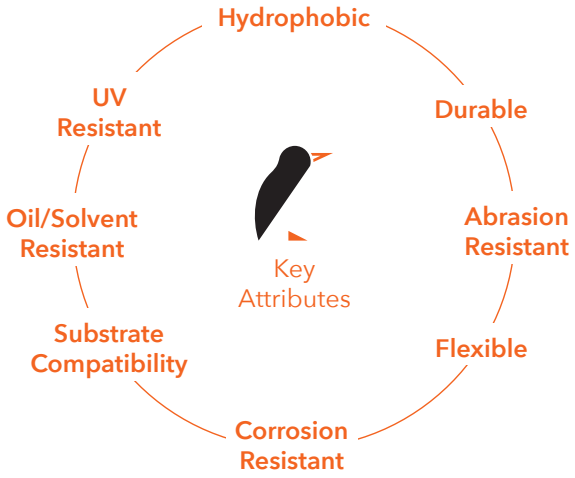
Gentoo™

Advanced Clear Hydrophobic Coating

Gentoo is the next generation of corrosion-resistant and easy-cleaning coatings. With its combination of high performing abrasion resistance and very low sliding angle, Gentoo excels where other coatings have fallen short.

Traditional hydrophobic coatings are clear and abrasion resistant, but do not shed fluid easily. Superhydrophobic coatings are generally great at shedding water, but are not clear, and are easily removed. Whether it's abrasion resistance, oil repellency or visual clarity, conventional coatings have their limitations. Gentoo changes that.

Gentoo is a clear coating that not only repels water but most oils and solvents. It is also able to withstand significant abrasion without sacrificing performance.



How does it work?

Gentoo is a dense polymer system that forms a barrier against corrosion initiators. This is due to its low surface energy, high density, and low porosity. The system is conformal, pinhole free, and very thin (4-6 microns) compared with traditional polymer coatings but far more dense and durable. The higher density of the system provides an excellent barrier to water and corrosive ions.

Adhesion & Durability

Gentoo has robust adhesion to painted, plated, and bare metallic substrates, as well as glass and surface primed plastics. The coating has demonstrated excellent resistance to salt spray, UV exposure,and chemical exposure – significant improvements over traditional hydrophobic coatings.

Corrosion Resistance

When used on top of other qualified systems, Gentoo further reduces corrosion and extends the lifetime of the barrier system and therefore the coated substrate. This is due to its excellent water and salt shedding properties and impact resistance. These properties also significantly reduce the effects of galvanic corrosion of dissimilar metals.

Easy Cleaning

The low sliding angle combined with the high dirt and solvent resistance of the coating allows for easy cleaning of many surfaces with less water.

Application

Gentoo is a two-part coating that is mixed together and then applied as a single coat. It can be flow-coated, dip-coated, HVLP sprayed, or painted on with a brush or roller. It provides a lightweight, thin (4-6 microns) coating with minimal surface preparation.

Chemical Resistance

Offers superior resistance to most oils, solvents, and acids.

Hydrophobic Data

	Contact Angle	Watershedding (50µl)
Acrylic	68˚	21˚
Polycarbonate	77˚	13˚
Polyurethane	99˚	26˚
Gentoo	**116˚**	**4˚**

Transparency Data

	Transparency	Haze
Untreated Acrylic	94.0	0.7
Gentoo Coated Acrylic	**94.0**	**0.4**
Untreated Glass	94.0	0.9
Gentoo Coated Glass	**94.1**	**1.3**

Taber Abrasion Test After Abrasion (500 cycles)

	Transparency	Haze
Untreated Polyurethane	89.2	18.8
Gentoo Coated Polyurethane	**90.6**	**5.9**
Untreated Acrylic	93.3	29.4
Gentoo Coated Acrylic	**93.8**	**4.2**

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