

Technical Data Sheet

Product Description

Gentoo is a clear, hydrophobic sol-gel coating that is specifically formulated for easy cleaning and corrosion protection. It is a low viscosity solvent-based system that can be applied with roller or brush, by flow-coating, dip-coating, or by spray application. It is water resistant and repels many paints, solvents, and hydrocarbons.

Product Characteristics

Finish:	Glossy
Color:	Clear
Percent Solids:	15 - 20% (Part A and Part B combined)
VOC:	770 g/L (6.43 lbs/gal) (Part A and Part B combined)
Flammability	Part A and Part B as liquids are flammable. After Gentoo has been applied and dried, it is not flammable.

Typical Properties

Contact Angle:	110° - 115° (50 µL droplet)
Watershedding Angle:	5° - 10°
Dry Thickness:	4 - 8 microns
Service Temperature Range:	-50°C - 160°C (-58°F - 320°F); Short Term: <200°C (<392°F)
Shelf Life:	Four years in original packaging at 24°C (75°F)

Surface Preparation

Remove all oil, grease, dust, dirt, loose rust, and other foreign materials to promote optimum adhesion. Clean smooth surfaces with 99% isopropyl alcohol (IPA) and microfiber cloths or other lint-free cloths. Surfaces should be clean and dry prior to applying Gentoo. Gentoo may not bond to all types of plastic without further preparation. Flame treatment, abrasive surface preparation or adhesion promoters may be required in order to attain adequate adhesion on plastics. For best results when applying Gentoo to painted surfaces, apply Gentoo when the paint is still "green" (dry to the touch, but not fully cured).

Personal Protective Equipment

Flow, Dip, Brush or Roller Coating: always wear the following minimum personal protective equipment: safety goggles and nitrile gloves. A paint suit/ Tyvek suit is recommended. If engineering ventilation controls are not available or sufficient, use a respirator (NIOSH/MSHA approved half-face respirator with an organic vapor cartridge) to protect from solvent vapors. Refer to Safety Data Sheets (SDSs) for both Part A and Part B before beginning to apply Gentoo.

Spray Coating: DO NOT spray Gentoo without sufficient engineering ventilation controls or without making a minimum of full-face respirators with OV/AG/P100 filters (OV = Organic Vapor; AG = Acid Gas) available to all those exposed to Gentoo spray. Wear nitrile gloves. A paint suit/Tyvek suit is recommended. Refer to Safety Data Sheets (SDSs) for both Part A and Part B before beginning to apply Gentoo.

Application Guidelines

Mix Ratio:	1:1 Part A to Part B (by weight). Blanket any unused Part A with argon (preferred) or nitrogen gas
Hydrolysis Time:	120 minutes at 21 °C (70 °F) or above
Filtration:	1-micron glass fiber filters
Brush, flow, dip:	Use equipment designed for solvents or oil-based paints
Spray (settings):	HVLP with 1.0 mm needle/tip and line/pot pressure less than 30 psi
Drying/Curing:	Tack free 15-30 minutes. Curing: up to 150 °C (302°F) / 1 hr. Typical: 90 °C (194°F) / 1 hr. 24-48 hrs at 25°C (77°F)
Cleanup:	Cleanup immediately with acetone. Once Gentoo is dry, it may need to be cleaned with abrasive means
Pot Life:	Under 2 hours at 30°C (85°F) Under 5 hours at 21°C (70°F) Under 12 hours at 5°C (40°F)

Complete application instructions:

<https://sforce.co/3kkKT7a>

Detailed Mixing Instructions

- 1) Shake Part A bottle well for 30 seconds prior to mixing Part A and Part B.
- 2) Mixing containers should be polyethylene, polypropylene, glass or stainless steel.
- 3) Part A and Part B are mixed at a 1:1 weight ratio. Add Part B to Part A. GENTLY and thoroughly mix solution with a magnetic stir bar, slow overhead mixer (compatible with flammable liquids) or hand stir for a minimum of 2 minutes. If magnetic stirrer bar is used, stirring can continue throughout 120-min hydrolysis time. COVER SOLUTION WITH A LID TO PREVENT SOLVENT LOSS DURING MIXING.
- 4) Blanket unused Part A with inert gas (argon or nitrogen).
- 5) After 120 minutes at 21 °C (70 °F) or above, the solution is ready to be used. If proper mixing is not achieved, Gentoo may not dry or cure appropriately. If in question, follow the QR code for proper hydrolysis identification.

Follow QR Code for Hydrolysis video:



- 6) Use coating within 5 hours after hydrolysis, when at 21 °C (70 °F). Chill coating for extended pot life.

Detailed Spray Coating Instructions

Apply in a thin single coat for best results (approximately 1 mil [25 microns] wet film thickness recommended). Do not apply multiple film builds over hydrophobic coating.