# PreKote<sup>®</sup> Technical Data Sheet | Liquid & Wipes

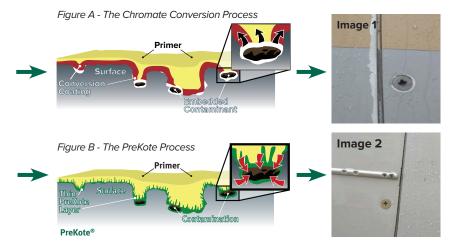


PreKote is an all-in one surface pretreatment product available in both a liquid and wipe form.

PreKote replaces both chromate and non-chromate conversion coating systems. It replaces acid etches, solvent washes, and other toxic substances used on metal and composite substrates prior to priming and painting. It can also be used as an adhesion promoter for metal to metal bonding. PreKote is a flexible surface pretreatment and works with virtually any paint or bonding process including large surface area paint jobs, immersion processes, and touch-up applications.

Paintable surfaces have millions of microscopic pores where dirt and contaminants become embedded. Over time, these microscopic contaminants become incredibly difficult to remove, and can actually block adhesion of primers and paint to the aircraft's surface when processes such as chromate conversion are used. (See Figure A). This can lead to paint failures such as chipping, peeling, blistering, and out-gassing (See Image 1).

PreKote's technology cleans the surface, and removes contaminants by creating a closer, stronger bond between the surface and coating (See Figure B). This results in fewer paint adhesion failures and better overall corrosion protection (See Image 2).



**About the photos to the right:** To compare the pretreatment process, a leading commercial airline treated one 737-800 with PreKote and another 737-800 with a chromate conversation coating. When the aircraft returned for a 24-month inspection, the airline declared PreKote provided superior protection and out-performed the chromate conversion coating.

## Works On Any Paintable or Prepainted Surface:

✓ Aluminum ✓ Annodized ✓ Composites ✓ Galvanized ✓ Magnesium ✓ Plastic ✓ Scuff-sanded ✓ Steel ✓ Titanium

#### **Physical & Chemical Properties**

Boiling Point	
Freezing Point	
pH (concentrate)	
VOC	65.5 g/L
Evaporation Rate	Less Than Water
Specific Gravity at 25°C	
Vapor Pressure	0.02mm Hg at 20°C
Vapor Density	
Water Solubility	
Biodegradable Rate	+90% in 28 days
Appearance	Clear Amber Liquid
Odor	Odorless
Rinsability	No Visual Residual
Application Temp	40-110°F (4-43°C)
Application Humidity	

#### **Performance Results**

PreKote has passed all traditional testing for pretreatments.

Test Description	Test Name	Results
Salt Spray	BMS 10-72, Test #20a ASTM B117	Pass
Filliform Corrosion	BMS 10-72, Test #20b	Pass
Rain Erosion	BMS 10-72, Test #23	Pass
Flexibility	ASTM D4145 (passes 1/8" Mandrel Bend Test)	Pass
Wet Tape Adhesion	BMS 10-72, Test 16	Pass
Corrosion Resistance	ASTM G85 Annex 4	Pass
Hydrogen Embrittlement	ASTM F519-97	Pass
Paint Softening	BMS D6-17487 ASTM F502	Pass
Humidity Resistance	BMS 10-11, Test 24.8.2.16	Pass



## **Application Types**

PreKote can be used on any paintable or painted surface of any size. It can be applied by the following methods:

- Manual application
- Spray application
- Power wash
- Immersion applications
- Touch-up applications (liquid or wipes)

#### Concentration

PreKote is used at full concentration for most applications. Please visit PantheonChemical.com and consult the application guide for more information.

#### Minimum Recommended Personal Protective Equipment (PPE)

A face shield/goggles and rubber gloves are recommended for handling PreKote during application. Please refer to the SDS for more information and check your company's safety policies.

# **Safety Benefits**

PreKote has a long list of environmental, health, and safety benefits. PreKote does non contain chrome and is non-toxic, non-hazardous, non-flammable, non-corrosive, CFC free, odor free, does not deplete ozone, and the liquid is also readily biodegradable upon disposal. Because PreKote is nonhazardous, users can reduce HAZMAT shipping and storage charges. The product requires less rinsing, reducing water consumption.

The **US Environmental Protection Agency (EPA)** found PreKote to have environmentally preferable chemistry. PreKote has been recognized with the Design for the Environment (DfE) award.

The EPA has also determined that PreKote is not one of the six core metal finishing effluent operations and does not trigger categorical industrial user (CIU) status.

# **First Aid Information**

Please review the SDS before using PreKote. Safety Data Sheets are available website at PantheonChemical.com

- **Skin:** Wash thoroughly with hand soap and rinse with water.
- **Eyes:** Flush with large amounts of water. If irritation persists, seek medical attention promptly.
- Inhalation: No fumes. No precautions necessary.
- **Ingestion:** Drink plenty of water or fruit juice. Do not induce vomiting. Seek medical aid.
- **Spill response:** Flush with water. Mop up any remainder and dispose of in normal fashion. Please follow all federal, state or local regulations regarding the treatment of waste.

PreKote Liquid Products	Stock Numbers
PreKote 1 Quart	#065-1002 NSN: 6850015138589
PreKote 1 Gallon	#065-1030 NSN: 6850015138586
PreKote 5 Gallon Pail	#065-1040 NSN: 6850015138567
PreKote 55 Gallon Drum	#065-1050 NSN: 6850015138560
PreKote 275 Gallon Drum	#065-1060 NSN: 6850015493632
PreKote Large Repair Kit Treats 200-300 sq. ft.	#065-1072 NSN: 6850015058688

PreKote Wipes		Stock Numbers
PreKote Wipes with Container	50 per container	#065-1081 NSN: 6850-01-602-6830
Wipes Only	50 per pckg. No container	#065-1080 NSN: 6850-01-602-6827

### **Liquid Shelf Life**

**Unopened: 36 months** from the date of manufacturing Store at 40-100°F (4.4-37.7°C).

Opened: 12 months. Seal container when not in use.

## Wipe Shelf Life

**Unopened: 12 Months** from the date of manufacturing. Store at 40-100°F (4.4-37.7°C).

Opened: 90 days. Seal container when not in use.



