

## SURFACE PREPARATION PRODUCTS

# VpCl<sup>®</sup>-440



## PRODUCT DESCRIPTION

VpCl<sup>®</sup>-440 is a water-based surface pretreatment for steel, iron, aluminum, brass, copper, and other metals. VpCl<sup>®</sup>-440 can replace phosphatizing and chromating systems.

VpCl<sup>®</sup>-440 helps coatings adhere better to surfaces that are too hard to adhere to; such as increasing the adhesion of a powder coating to aluminum.

## FEATURES

- Multi-metal functionality
- Up to 20% improvement of adhesion to hard to adhere to metals
- Inhibits flash rusting on steel, iron, aluminum, brass, copper, and other metals
- Economical
- Self preserving

## EFFECTIVE USES

- Adhesion promoter for coatings
- Used as an effective pretreatment for rinse tanks to improve protection in dry storage.

## TYPICAL APPLICATIONS

VpCl<sup>®</sup>-440 can be scrubbed on (see Method 1) or applied with any conventional equipment including sprayers, dipping tanks (see Method 2), steam cleaners, or power washers.

### Method 1- for primary use on airplanes

- Step 1: Apply liberally to the substrate and scrub on with 180-240 grit aluminum oxide pad.  
Dry for 2 minutes.
- Step 2: Repeat step 1
- Step 3: Rinse off substrate with water and allow to dry.

### Method 2- for primary use in dip tanks

Dip the parts for 5 minutes in a tank of diluted VpCl<sup>®</sup>-440 and allow to dry. Once parts are dry to the touch, usually within 5-10 minutes, the parts can be handled and painted.

## PROPERTIES

Appearance	Clear to hazy liquid
pH	10-11
Density	8.0-8.5 lb/gal (0.96-1.02 kg/l)
Temperature Range	50-212°F (10-100°C)
Dilution	
• adhesion promotion	0.1-0.25% in water
• stand alone protection	1-10% in water
Dry To Touch	5 minutes
Dry to Handle	10 minutes

### Stand alone use on carbon steel

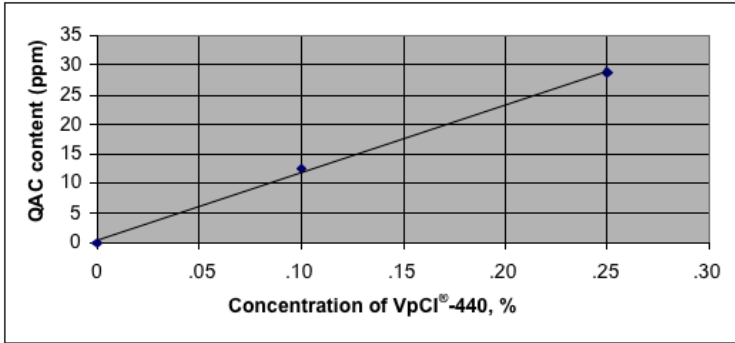
Dilution	Humidity (ASTM D 1739)
4-10 %	500 hours

## PACKAGING

VpCl<sup>®</sup>-440 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk.

**Adhesion Promotion Table**  
**0.1 - 0.25% Dilution**

Determination of the concentration of VpCl®-440 using K 9065 test kit

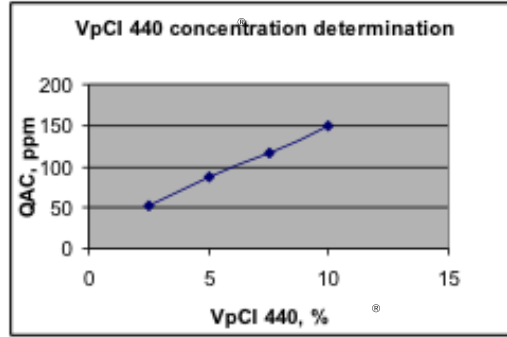


\*Note: Before testing solutions were diluted 1:9 with water

**\*Test method and Test Kit information available upon request.**

**Stand alone Protection Table**  
**1 - 10% Dilution**

Determination of the concentration of VpCl® 440 using K 9065 test Kit\*



\*Note: Before testing solutions were diluted 1:9 with water

**FOR INDUSTRIAL USE ONLY**  
**KEEP OUT OF REACH OF CHILDREN**  
**KEEP CONTAINER TIGHTLY CLOSED**  
**NOT FOR INTERNAL CONSUMPTION**  
**CONSULT SAFETY DATA SHEET FOR MORE**  
**INFORMATION**

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