

# Vertical Pipe Rehabilitation Resin System

Max VertiPox<sup>™</sup> Resin Max VertiPox<sup>™</sup> 30 Hardener Max VertiPox<sup>™</sup> 60 Hardener

# **INTRODUCTION:**

Max VertiPox epoxy resin systems are two-part, 100% solids, styrene-free epoxies uniquely formulated for Vertical piping and in-building applications that offer superior mechanical properties, chemical resistance, and adhesion to pipe materials – even under very humid and wet conditions. As a part of the MaxLiner® liner system, these resins are specially designed with excellent wet-out capability, low-odor and contain zero VOC's.

# **TECHNICAL DATA:**

Max VertiPox Resin Systems are a 3-to-1 ratio epoxy system designed to meet all specifications for full structural Cured-In-Place Pipe (CIPP) liner conforming to ASTM F1216. Using Max VertiPox Base Resin in conjunction with Max VertiPox Hardener will achieve a fully cross-linked system to for a high quality, long-term solution. Mixed resin pot life varies with temperature and total mass of material mixed. The data provided below is for reference only. For more detailed product information, contact MaxLiner prior to use.

#### Max VertiPox Part A



**Max VertiPox Part B** 



#### **REACTION DATA**

Mixing Ratio A:B	3:1 by weight
Temperature	70°F prior to mixing
Cure	Hot Water, Hot Air or Ambient Cure – see detailed instructions

## MATERIAL DATA

		Max VertiPox Resin	Max VertiPox 30 Hardener	MaxVertiPox 60 Hardener
Weight	lbs/gal	9.52	8.62	8.54
Color		Yellow	Light Brown	Light Brown
Viscosity		3,000 cps	233 cps	230 cps
Mixed Viscosity				
Gel Time @70°C	100 gm @ 23℃		40 min	60 min
Cure Cycle			1.5 hours Ambient	1 hour at 150°F 4 hours Ambient



#### **MECHANICAL PROPERTIES**

System Components		ASTM F1216	Max VertiPox 30 Hardener	Max VertiPox 60 Hardener
Flexural Modulus, psi	ASTM D790	250,000	373,531	339,289
Flexural Strength, psi	ASTM D790	4,500	9,559	10,159
Compressive Strength, psi	ASTM D695	4,000	8,784	5,500
Tensile Strength, psi	ASTM D638	3,000	4,655	4,597
Tensile Elongation, %	ASTM D638	5	5	5

## **COMPONENTS & PROPERTIES**

#### **COMPONENTS:**

Max VertiPox Resin Base (Part A) is uniquely formulated 100% solids unfilled epoxy resin. Max VertiPox 30 & 60 Hardener (Part B) are modified Amine curing agents.

#### SYSTEM:

3 parts of resin (Part A) and 1 part of hardener (Part B) by weight are mixed thoroughly for a minimum of 3 minutes at approximately 200 rpm. Take precautions not to incorporate air while mixing. The mixed resin is then used to fully saturate (wet out) MaxLiner tubes specially designed for MaxLiner Lining Systems. Follow MaxLiner recommendations for equipment and procedures for liner wet-out and installation.

## FINAL PRODUCT:

The combined resin and liner system is cured after insertion into the host pipe to form a tough, strong renovated pipe. It is resistant to municipal sewage, acids and alkalis commonly found in drains, sewers and commercial wastewater.

#### SHELF LIFE & STORAGE:

One year in well-sealed containers in a sheltered area between 65 - 80°F. Max VertiPox Resins are formulated for resistance to crystallization. However, if in the event of crystallization, contact MaxLiner immediately prior to use.

#### SAFETY

Always use safety glasses and protective clothing including gloves when using this product. Max VertiPox Resin Part B contains Amine. Do not ingest. If Max VertiPox Hardener Part B comes in contact with eyes, flush immediately with water. Always read the container label warning and Safety Data Sheet prior to use. If you do not understand or cannot adhere to the guidelines and procedures for handling and use of these products in strict accordance with the SDS, do not use these products. Contact MaxLiner for a copy of SDS or download from our Mobile App.

## DISPOSAL

Disposal must conform to local and state regulations.

\*It is important to note that the Max VertiPox Resin System is specifically designed for CIPP applications and has not been

modified from another industry resin in attempt to fit the complex environmental, design and performance needs required in underground rehabilitation industry.

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