

PVC Pipe Cleaning Guide

a FORMUFIT field manual



PVC Pipe Cleaning Guide

Welcome.

This guide is designed to be friendly, knowledgeable and to provide options for different people from all settings and backgrounds. Whether you're a first time PVC builder, who has never picked up any type of tool, or a seasoned PVC enthusiast or maker who uses PVC in everyday ideas and activities, this guide should provide a general manual to cleaning plumbing grade PVC pipe.

First, we'll cover all the basics, like general safety instructions. Then we'll get into what types of methods are available to clean plumbing-grade PVC pipe. Finally, we'll talk about some additional PVC manipulation methods for finishing up the cleaning process.

If your questions are not addressed here, feel free to contact our support team at info@formufit.com. We'll be glad to help.

About the Second Edition

We previously put all of our PVC tips online, in a basic HTML Web page format, however, we found that many of our users needed a printable copy that could be taken to the garage, workshop or a location where the cutting, assembling or pipe painting was being performed, away from a PC. This latest edition solves that problem, giving our end-users a printable 'field manual' that can be taken along with them to wherever they choose to construct their creations.

Additionally, we address some additional questions that have been raised about PVC pipe cleaning since the development of our original online-only tips.

Cleaning PVC Summary

While it's not necessary to clean PVC pipe when using FORMUFIT Furniture Grade PVC pipe, many of our users prefer to use less-expensive, off-the-shelf plumbing grade PVC pipe from their home center or hardware store.

Standard plumbing-grade PVC has all sorts of issues; manufacturer ink stampings, size indicators, grease or release agents from manufacturing or just dirt from sitting in a warehouse or on a hardware store shelf.

We offer these cleaning tips to allow our users to use this inexpensive, readily available pipe, and to hopefully complete their project with minimal cost. It's the goal of this field manual to show how to bring plumbing-grade PVC pipe into a (more) attractive appearance without sacrificing cost.

Necessary Legal Jargon

DISCLAIMER: The information provided within this manual is for informational purposes only. FORMUFIT accepts no responsibility, and is excluded from all liability for damage and/or loss which may be suffered by any other party as a result of using or in connection with such use or loss of use of this information, including but not limited to loss of profit, loss of opportunity, loss of business, indirect damages, incidental damages, special or consequential loss, injury or loss of life.



Safety First.

The procedures outlined in this field manual use chemicals, such as Acetone, to remove markings on PVC pipe. As with any manual that involves tools or chemicals, safety needs to be discussed.

Chemicals can be dangerous.

Most methods to clean PVC pipe involves the use of chemicals. Each of these chemicals can cause serious harm to an individual if not used properly. Be sure to read, understand, and follow all the safety rules that come with chemical products and their packaging. Failure to do so could cause bodily harm.



HANDS

Always make sure you use some type of hand protection when working with chemicals, such as the ones discussed in this field manual.



EYES

Wear safety glasses, goggles or other eye protection when working with chemicals. The chemical product may spill, splash or you may accidentally rub your eyes. This is critical when dealing with chemicals.



MOUTH & LUNGS

Wear a mask or respirator. Work in an open garage, or in a workshop with open windows. Vapors from the chemicals may cause you to become dizzy. If this occurs, leave the room immediately and seek fresh air.

Some PVC products can be dangerous.

While FORMUFIT Furniture Grade PVC is nontoxic and completely safe for adults, kids and pets, Plumbing-Grade PVC pipe from your hardware store or home center **does** carry additional warnings.

All PVC contains chlorine (Cl). At ambient temperatures the chlorine is a solid, is stable, and is not released from the PVC pipe. When chemicals are used on the exterior of the PVC pipe, it causes the outer surface of the pipe to chemically melt, and the chlorine can turn from a solid into a gas and be released from the pipe.

Limited exposure is not harmful, but it is recommend that a high-quality breathing mask or respirator be used.

PVC Cleaning Methods Explained

There are three recommended methods to cleaning plumbing-grade PVC pipe:

Surface Sanding

The easiest method to clean the manufacturer ink markings from the surface of PVC pipe is to use foam or rubber sanding blocks to sand away the markings. This method will sand off elements of the pipe surface, revealing only the plastic below the ink and markings. It uses sanding blocks which are available in most hardware stores and home centers. This method may result in a patchy dull, matte finish, but does not require the use of chemicals.

Surface Ink Dilution

The most common method to clean the manufacturer ink markings from the surface of PVC pipe is to use Acetone to break up and dilute the ink. The ink is a complex formula which is applied by way of a pipe printer, directly to the pipe. The only method to remove the ink is to melt the ink itself from the pipe and quickly wipe it away. This method often results in a streaky and incomplete surface cleaning if not performed quickly, leaving the a purple haze on the pipe.



Surface Dissolve Cleaning

Surface Dissolve Cleaning should only be used for spot-cleaning, or for very stubborn areas. It involves using PVC cement to dissolve or 'melt' the surface of the PVC pipe to remove the ink or other markings. This method is not recommended as it can cause gouges and other defects to appear in the pipe surface. Only use this method, should the pipe need to be seriously cleaned.



PLEASE NOTE: Off-the-shelf plumbing-grade PVC pipe that you buy from your home center or hardware store does not include any protectant within it to keep it pure white. Ultraviolet (UV) rays such as those emitted by sunlight and fluorescent lighting will yellow the pipe and cause it to become brittle.

There is no method to remove the yellowing apart from painting the PVC pipe, or replacing it with FORMUFIT Furniture Grade PVC pipe.

FORMUFIT Furniture Grade PVC pipe includes special inhibitors that allow the pipe to stay white, or keep its color indefinitely and cause it from cracking or becoming brittle.

Cleaning PVC Pipe Using the Surface Sanding Method

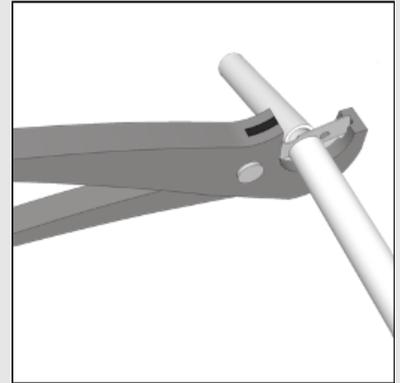
CAUTION: Be sure to use eye and breathing protection when sanding PVC pipe. Some surface elements of the PVC pipe can be introduced into the air when sanding.

Surface Sanding Steps

STEP 1

Perform the cuts necessary for the PVC pipe segments. It is easier to work with smaller sizes and cut first, rather than working with large segments.

You will want to work with each small section at a time, as you will need to act hastily before the acetone evaporates.



STEP 2

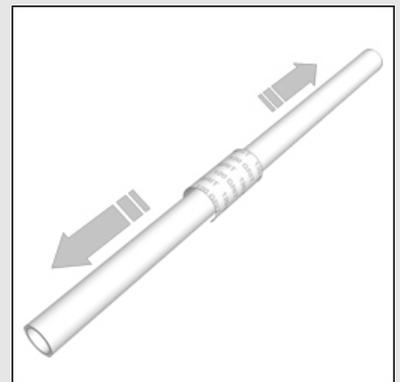
As mentioned before, work outdoors or in an open garage. Sanding the PVC may introduce particles into the air which could be dangerous or at least irritable to the lungs.



STEP 3

Using a fine (200-300) grit sanding pad or sandpaper, rub the pad along the surface of the pipe where the ink and markings occur.

Continue until the pipe is completely clean. If specific areas of the pipe show apparent clean patches, perform an overall sanding of the pipe to match. If this method does not work well, continue with one of the other two methods described below.



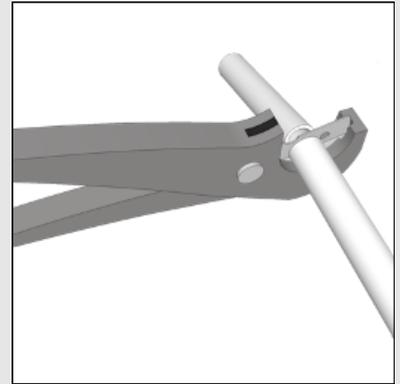
Cleaning PVC Pipe Using the Surface Ink Dilution Method

CAUTION: Be sure to use hand, eye and breathing protection when handling Acetone. While, unlikely, should you feel dizzy for any reason, leave the room and seek fresh air immediately.

Ink Dilution Steps

STEP 1

Perform the cuts necessary for the PVC pipe segments. It is easier to work with smaller sizes and cut first, rather than working with large segments. You will want to work with each small section at a time, as you will need to act quickly before the acetone evaporates.



STEP 2

As mentioned before, work outdoors or in an open garage. Acetone emits vapors which are harmful and can cause dizziness or headaches. It may be best to use a respirator when working with Acetone, just as a precaution.



STEP 3

Before you begin, be sure to use gloves when handling acetone. You will want to use the heavy, yellow kitchen gloves, as the acetone will break down thin latex or nitrile (blue) gloves.



STEP 4

Apply an extremely small amount of acetone onto steel wool by tipping the acetone can into the steel wool pad.

Do not use large amounts as it will carry it down the pipe and cause the ink to streak.



STEP 5

Rapidly work the surface of the PVC pipe in a circular motion. Concentrate on the areas of lettering and bar codes first, as the acetone will evaporate quickly.

Act very fast as the acetone begins to evaporate when it meets with air.



STEP 6

Working quickly, immediately wipe away the ink and smears with a clean cloth rag until they disappear.



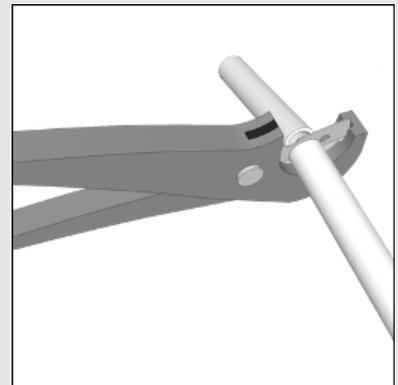
Cleaning PVC Pipe Using the Surface Dissolve Method

CAUTION: Only perform this method if the Ink Surface Dilution Method fails. Be sure to use hand, eye and breathing protection when handling PVC cement. While, unlikely, should you feel dizzy for any reason, leave the room and seek fresh air immediately.

Surface Dissolve Steps

STEP 1

Perform the cuts necessary for the PVC pipe segments. It is easier to work with smaller sizes and cut first, rather than working with large segments. This method should only be performed on small, spot & trouble areas.



STEP 2

As mentioned before, work outdoors or in an open garage. PVC cement can emit vapors which are harmful and can cause dizziness or headaches. It may be best to use a respirator when working with PVC cement, just as a precaution.



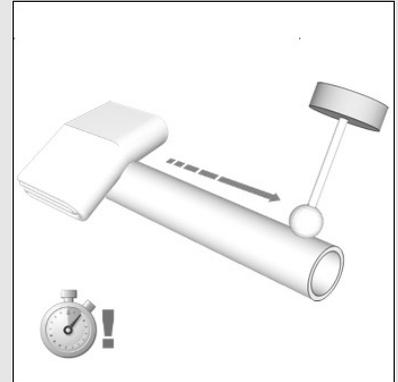
STEP 3

Before you begin, be sure to use gloves when handling PVC cement. You will want to use the heavy, yellow kitchen gloves, as the PVC cement will break down thin latex or nitrile (blue) gloves.



STEP 4

Using the can-provided dauber, tap an extremely small amount of PVC cement onto the PVC pipe where the ink or markings appear. Wipe away quickly.



Wrap Up

Post-Cleaning Beautification

MAKING PVC PIPE GLOSSY

You can add a sense of 'glossiness' to the PVC pipe, after cleaning has been performed to give it shine and to make it match the high-glossiness of FORMUFIT PVC fittings that you may be using. This can be achieved using an off-the-shelf tire shine spray or liquid cleaner that is normally used on vehicle tires to make them appear new.

CAUTION: Do not use the tire shine cleaner on any PVC pipe that you plan to use as a foothold or a handhold. The tire shine cleaner contains silicone, which will make the PVC pipe extremely slick. This could cause someone using the pipe segment as foot or hand-hold to slip and injure themselves.

1. Apply the tire shine cleaner to a cloth or paper towel.
2. Apply the tire shine to the PVC pipe, being sure to evenly distribute the tire shine across the whole pipe.

PVC Cleaning Avoidances

What not to do:

- Avoid using abrasives, such as sandpaper to clean the surface of Furniture Grade PVC. This will scratch the surface of the PVC pipe and cause a swirling or line effect to appear in the pipe surface, or may leave a dull finish. Only use this method on plumbing grade PVC pipe.
- Don't use regular household cleaners, unless you are simply removing dirt. Regular household cleaners, and other cleaners like bleach will not remove the ink or lettering on PVC pipe which has been printed with a special PVC embedding ink.

FORMUFIT Support

If you've read through this guide and still have questions, feel free to contact us. We are constantly revising our documents and website with information provided from users just like you.

If you want to contact us with questions or suggestions, please email them to info@formufit.com.

We've got a lot more guides where this one came from, which are available at formufit.com/guides/

