



How to refill your HP Pro Color M251n, M251nw, MFP M276n

Suitable for use with: MFP M276nw

Before use, familiarise yourself with the safety information on pages 6 to 8.

“Introductory cartridges” can be refilled, but more difficult

The new machine arrives with a set of so-called “introductory cartridges” (quoted by HP as yielding 700 pages). They have less toner in than the cartridges you can subsequently buy and their physical design differs in ways you need to know about for refilling them.

This kit and our refill bottles are directed towards the ongoing “bought” cartridges in terms of the weight of toner they contain: 1.6K page yield for the black standard cartridge and 1.8K for the colour cartridges.

Not all of the toner we give you will fit into an introductory cartridge: to avoid mess, don’t try and get it all in at once (we remind you again in the flow of the instructions).

In addition, you’ll see that, for introductory cartridges, the refilling hole has to go in a riskier place as far as leaks are concerned. More risky because gravity isn’t on our side there, so the seal has to be perfect. Toner leaking willy-nilly into your printer’s paper path is something you want to avoid: follow our advice to steer yourself away from problems.

Refilling the bought cartridges is more straightforward.

Both types of bought black cartridge can be refilled

Both the standard capacity and high capacity bought **black** cartridges can be refilled OK. Either type will effectively come out as *standard capacity*. This is a conscious decision on our part so you don’t have to worry about the possibility of over-filling the standard cartridge with a high-capacity weight. Instead, what we give you can be used freely in both with no worries. But remember the warning about introductory cartridges above.

At “[Colour] cartridge is very low” message, press OK button and carry on printing till fade out

As you use your printer, there’ll come a point where it won’t let you print anymore. The “attention” (exclamation mark) light on your printer’s control panel will flash, along with the following rolling display message



PRESS the **OK** button and then carry on printing until you get actual toner fade out.

Note: the machine’s default setting is for this behaviour to happen. But you can also change this setting as follows. If you do, you’ll be able to print directly to fade out with none of the above symptoms.

To change to “Continue to print” at “[Colour] cartridge is very low”

On the control panel, press the **OK** button

Use arrows to select **System Setup** menu, press **OK**

Use arrows to select **Supply Settings** menu, press **OK**

Use arrows to select **Black or Colour Cartridge(s)** menu, and press **OK**

Use arrows to select **At Very Low Setting** menu, press **OK**

Select **Continue**, press **OK**



Click link below to get this and many more HP laser printer refill kits (UK and most of Europe)

http://www.urefilltoner.co.uk/toner_refill_printers.aspx?manufacturer=Hewlett+Packard



Knowing which cartridge is fading out

Swatch download URL: <http://www.urefilltoner.co.uk/downloads/toner-refill-fade-out-swatch.pdf>



Cyan cartridge starting to fade. What should be royal blue is actually pink

You'll see from your prints that something's fading, but depending on what you're printing, it's not always obvious which colour is the culprit. The mainly blue image left shows the kind of counter-intuitive effect you can get

It's crucial to know which of the four cartridges to refill. Download this 4 colour A4 swatch from the swatch download URL at the start of this section. Print the swatch and interpret the results according to this table ...

Colours affected	Cartridge fading
Black only	Black
Blue only	Cyan
Blue and orange	Magenta
Yellow and orange	Yellow

Having identified the fading cartridge, just refill it according to the "How to refill it" section below.



Important: only refill the cartridge that's showing signs of fading

Don't "top up" all the cartridges while you're "at it". The laundry list of things that can go wrong with this approach is as long and dreary as the websites that promote it. Make up your mind right now to just refill each individual cartridge as and when it fades out.

How to refill it

- 1) Turn on melting tool and wait 5 minutes to reach operating temperature (see page 6 for guidance on safe use of melting tool)
- 2) Re-fit the orange OPC drum protector if you've got one handy
If not, take care not to touch or handle the pale blue OPC cylinder. Don't rest the cartridge on the pale blue OPC cylinder
- 3) Find position for refill hole as shown



Introductory cartridge refill hole



- 4) Melt your hole (see page 6 for guidance on safe use of melting tool). Press lightly. If tool is hot and hole is just in right position, hole will be made easily.

Bought cartridge refill hole





- 5) Before opening toner bottle, shake vigorously for 5 seconds.
- 6) Open toner bottle and screw on spout.
- 7) To avoid leakage of microfine toner, wrap any kind of tape around join between spout and bottle: selotape, brown parcel tape, gaffa tape etc.
- 8) Hold cartridge nearly upright with one hand. Use other hand for bottle.
- 9) Jam spout into cartridge and, keeping spout jammed in with distinct pressure, lean cartridge back until bottle is near vertical.
- 10) Wait for a count of 5 for toner to flow in.



- 11) Return cartridge to approx. 45 degree angle and, keeping spout in hole, rotate bottle down to below horizontal.

Introductory cartridges only: take a look inside hole. Stop if you can see toner level is close to hole. Go carefully if filling it some more. **Not all of toner will fit in an introductory cartridge.** Save some toner for next time.

- 12) Put finger over end of spout and give bottle another shake. Repeat shaking and pouring until all the toner has been poured (bought cartridges) or until chamber can't be filled any more (introductory cartridges).
- 13) Use swab provided to clean up any stray toner around hole.
- 14) **Introductory cartridge only:**

- a) Use scissors to trim off part of lip of plug
- b) Fill groove of plug with silicon glue or sealant all way round (glue shown)





- c) Engage groove of plug with inner edge of melted hole in one place. Squeeze plug to engage more of groove with cartridge. "Persuade" last of groove to engage with flat blade of a screwdriver. This is what we're aiming at
- d) Wipe off excess silicon glue or sealant, but leave plenty under plug's flange and in cracks
- e) Gently shake cartridge over a blank sheet of white paper to check for any toner leaks from sealed hole. If leaky, smear more sealant over leaky point. Consider re-doing the hole-sealing operation. Leave cartridge overnight to dry if there are large amounts of silicon glue or sealant needed for an effective seal.



15) Bought cartridge only:



There's no need to trim lip of plug. Just fill groove with silicon glue or sealant. Fit plug by engaging groove with inner edge melted hole.

Note: Introductory cartridge more prone to leakage so check for leaks after a few hours or a few hundred pages of operation in the machine.

Empty waste before doing 2nd refill

Empty waste anytime vertical streaks appear

Emptying waste is messier than a refill

As these machines print, they produce waste toner. It's sneakily stored inside an empty chamber inside the toner cartridge. If the waste fills up completely, you'll start to get "waste streaks" like these yellow examples vertically, all the way down the page (could also be black, blue or pink of course, according to the colour of the cartridge).

Our testing on the Pro M251dn showed this is most likely to happen during the 2nd refill. So if you want to empty the waste, the preventative route would be to empty the waste before a 2nd refill.

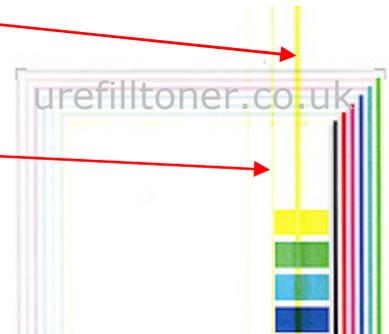
It's also just about feasible to wait until you get waste overflow streaks and empty the waste at that point. You have to catch it straight away, though. Otherwise the abrasive action of compacted waste will quickly and permanently scratch the pale blue OPC cylinder: at which point, it's curtains for that cartridge.

We say "if" you want to empty the waste, because it's your call. Emptying the waste is messier than just refilling. If you're up for it, though, here's how it's done:

1. Waste hole is in same position for both introductory and bought cartridges. Note: Hole position needs to be more accurately melted on the introductory cartridge due to narrower waste section. Melt waste hole in place shown.



2. Shake waste toner straight into an outside bin: do not expose the pale blue OPC drum to direct sunlight.
3. Wipe stray toner from cartridge surface with absorbent paper.





4. Outside of cartridge can optionally be cleaned with vacuum cleaner fitted with the "hairy" attachment. However, take great care not to scratch the very delicate pale blue OPC drum surface and only perform surface cleaning: do not penetrate into crevices. **Safety note:** consult your vacuum cleaner manufacturer over the suitability and safety of using your model before vacuuming toner powder.
5. Use alcohol swab to clean and prepare flat surfaces around hole.
6. Seal hole with any tape that's wide enough. Some duct tape's included in the kit to get you started (you'll need to cut the patch supplied).
7. Occasionally check the cartridge to make sure the seal's holding. Tiny leaks can be sealed with silicon glue or white sealant in syringe.

Note about sealant

The kit comes with either silicon glue or some sealant in a syringe. This is just to get you started without delays. In fact, ordinary bathroom sealant you can get from any DIY shop is perfect for the job. So you might want to make sure you've got some bathroom sealant handy for later on in your refilling career (when what we've supplied runs out).

Consciously "chipless" on August 2013 release

Because it's not necessary for a successful refill, a chip is **not supplied** with this Starter Kit.

To go with the cheapest possible refilling strategy, we've released these products on a platform that

- 1) Enables you to use all the original and refill toner you paid for by running the cartridges till they fade out
- 2) Avoids the cost of new chips
- 3) Avoids the extra hassle of having to install new chips

And we've checked over thousands of prints that this solution is viable over the long term.

But there is a downside to this approach. It's that you don't get any warning before a cartridge runs out. And you might print some prints that are no good before you notice. But we think that what comes off smallish laser printers tends to be looked at and in any case, colour laser printers aren't the most reliable technology in the cosmos and owning one is going to involve you in some hands-on management. And that, Charlie Brown, is what we're thinking on your behalf at the moment. Let us know if you don't agree.

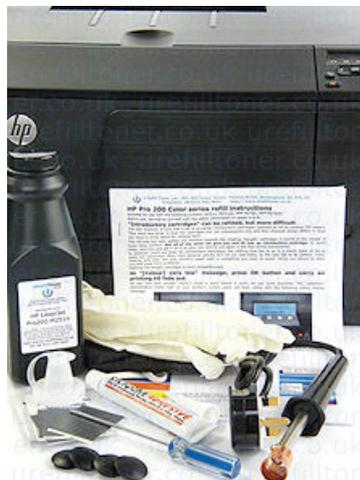
Effective refill lifespan of cartridges

With due attention to waste issues, we've performed 5 successful refills of the black cartridge. There's no reason at the time of writing not to expect similar hardiness from the colour cartridges.

Of course, some cartridges can mysteriously go down early due to anything from slight manufacturing imperfections to a human hair being forced into delicate seals by the mechanical operation of the printer.

If you're rolling your sleeves up for a sixth refill, by all means go for it, but bear in mind that no cartridge is going to go on for ever.

If you're persistently getting toner on the page where you don't want it, and you've ruled out waste overflow as a cause, it's normally time to send that particular cartridge to the great laser printer in the sky. That could literally mean to meet its maker: HP do have a "re-cycling program". Check their website for details. Read the small print, though.



Click link below to get this and many more HP laser printer refill kits (UK and most of Europe)
http://www.urefilltoner.co.uk/toner_refill_printers.aspx?manufacturer=Hewlett+Packard



Use and safety of the melting tool

The tool needs at least 5 minutes to reach an efficient melting temperature.

To melt a hole, apply a light force similar to pressing on paper with a ballpoint pen. Ease off the pressure as the tool sinks into the plastic.

During the first 6 minutes of the first ever use, smoke will come out of the heated part of the tool as manufacturing lubricants burn off. This is normal.

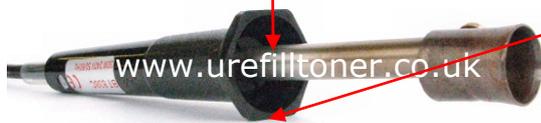
Use a screwdriver to push out the residual plastic plug while the tool is still hot.

Occasionally, the plastic plug falls inside the cartridge. Try and get it out using tweezers or pliers if you can. A piece of plastic this size inside the toner compartment doesn't usually do any harm, but be aware that it's there and retire the cartridge if it shows signs of physically jamming.



Important safety information

- To be used only by a competent, risk-aware adult.
- Use only in a well-ventilated situation. As with the combustion of any organic substance (such as petrol or tobacco) a cocktail of gases can be produced and some of these are harmful or at least irritant.
- All metal parts of the tool get dangerously hot. Never touch any metal part of the tool, including the steel shaft near the plastic handle.



When not in hand, the tool is designed to be rested at an angle created by the flange of the handle, keeping the hot parts suspended above your surface. But take care that the power cable doesn't force the handle to rise and the hot end of the tool to dip.

- Take care not to melt through the tool's own electric cable.
- Do not use the tool with the end-piece or blank filler tip

removed.

- Turn off and unplug the tool as soon as you've melted your hole. Leave to cool at least 2 metres away from your toner pouring area.
- Do not leave on for more than 30 minutes at a time.
- After use, allow the tool to cool down naturally. Do not immerse in water.
- Take all precautions for the use of a powered hand tool. Use eye and hand protection.

Assumption of risk notice

We ourselves have no hesitation in researching and refilling cartridges using the melting technique in a well-ventilated room. However, the company gives no warranties, neither explicit nor implicit, as to the safety of melting holes in toner cartridges or the use of the melting tool. Any activity or process has an element of risk. The onus is on you, the purchaser, to assess any possible risk, including the inaccuracy or incompleteness of currently available information. If you decide not to go ahead, return the product to us and we'll cheerfully refund your money. This offer is additional to your statutory rights.

©® Ownership of all intellectual property relating to the melting tool has been asserted and secured.

Safety Data HP M251 type toner

Take maximum precaution when using a screwdriver as a lever: consider safety and protection of eyes and hands from sudden slippage or unexpected freeing of the tool.

Only to be used by a competent risk-aware adult. Not to be used by children. Avoid inhalation of product. Avoid eye and skin contact. Do not ingest. Avoid sources of ignition while pouring and at all times.

1 Identification of the substance and the company

Product name	HP M251 type refill bottle
Part no.	HPM251BOTB, HPM251BOTC, HPM251BOTM, HPM251BOTY
Supplier	U Refill Toner Ltd. Contact details as per page header

2 Hazards identification

Classification	Not believed to be classified as hazardous according to OSHA CFR 1910.1200 or EU Directive 1999/45/EC, as amended.
Acute health effects	
Skin contact	Unlikely to cause skin irritation
Eye contact	May cause irritation
Inhalation	Irritation to respiratory tract if exposed to large amounts of toner dust
Ingestion	Unlikely when used as intended. Acute oral toxicity is believed to be low
Potential health effects	
Routes of exposure	Skin contact, eye contact and inhalation. Ingestion unlikely.
Chronic health effects	Prolonged inhalation of excessive amounts of any dust may cause lung damage
Carcinogenicity	Carbon black is classified by IARC as group 2B (possible human carcinogen). Carbon black in this preparation, due to its bound form, is not believed to present this risk.

3 First aid measures

Inhalation	Move person to fresh air. If breathing is difficult, obtain medical assistance
Eye contact	Flush with plenty of low pressure water for at least 15 minutes. Do not rub eyes. Remove contact lenses to ensure thorough flushing.
Skin	Wash with water, obtain medical attention if ill effects occur



Ingestion	Rinse out mouth with water. Drink one or two glasses of water. If large quantity swallowed seek medical advice
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4 Fire fighting measures

Hazardous combustion products	Carbon monoxide and carbon dioxide
Extinguishing media	Water, dry chemical, carbon dioxide or foam
Special fire fighting procedures	Avoid inhalation of smoke. A self contained breathing apparatus and suitable protective clothing should be worn.
Unusual fire & explosion hazards	Toner is a combustible powder; formation of an explosive dust-air mixture is possible. Avoid all ignition sources if toner has been dispersed in air.

5 Accidental release measures

Spill/leak procedure	Sweep up or vacuum spilled toner and transfer into sealable waste container. Sweep slowly to minimize generation of dust. If vacuum is used, the motor must be rated as dust tight and safely applicable to the vacuuming of toner dust. Residue can be removed with soap and cold water. Garments may be washed or dry-cleaned after removal of loose toner.
Environmental precautions	Do not flush into surface water or sanitary sewer systems. Dispose of waste material in accordance with all applicable laws.

6 Handling and storage

Handling	Keep containers closed when not in use. Handle and open containers with care. Use with adequate ventilation. Avoid inhalation of dust and contact with skin and eyes. Keep away from sources of heat, sparks and open flames.
Storage	Store at room temperature in the original container. Keep container tightly closed and dry. Do not store with strong oxidizers.

7 Exposure controls and personal protection

UK exposure guidelines	WEL: 10mg/m3 (inhalable dust), 3mg/m3 (respirable dust)
Personal protective equipment	
Eye / face	Wear dust resistant safety goggles if there is danger of eye contact
Hands / skin	Wear protective gloves
Respiratory protection	Wear approved respirator for dust when exposure exceeds permissible limits
Additional measures	Use in a well ventilated area. Use engineering controls to reduce air contaminants to permissible limits. Wash hands after use.

8 Toxicological information

Oral toxicity	Tests on toners have indicated there is no evidence of acute oral toxicity. Not classified for acute oral toxicity according to EU Directive 67/458/EEC and 1999/45/EC
Inhalation toxicity	No data
Eye irritation	Not classified as irritant according to OSHA HCS and EU 67/548/EEC as amended
Sensitization	Not classified as sensitizer according to OSHA HCS and EU 67/548/EEC as amended
Chronic toxicity	No data
Carcinogenicity	Carbon black is classified as a group 2B by IARC, but carbon black is present only in bound form in this preparation.
Mutagenicity	Negative (AMES test)
Reproductive toxicity	Not classified as toxic according to EU 67/548/EEC as amended

9 Ecological information

Not tested for ecological effects

10 Disposal considerations

Collect into tightly sealed containers. Dispose of waste in accordance with all local laws. Do not throw in open fires in order to prevent risk of dust explosion.
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11 Transport information

General	Not regulated
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12 Other information

Labelling EU 67/458/EEC	
R & S phrases	Not required
Hazard symbol	Not required

Notice. All safety information is given to help facilitate the safe use of this product and is based on information obtained from the manufacturer. This information is believed to be correct, but does not purport to be all-inclusive and shall only be used as a guide. U Refill Toner Ltd makes no warranty, express or implied, as to the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions and / or compliance with local laws and regulations.

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If you the purchaser decide not to go ahead with refilling for whatever reason, simply return the product or products to U Refill Toner Ltd and we will cheerfully refund your money. Your statutory rights are unaffected



About this "how to refill" guide

These CopyLeft instructions from <http://www.urefilltoner.co.uk/> are the same as those included with our HP Pro 200 M251n, M251nw, MFP M276n toner refill Starter Kit.

A Starter Kit is our "zero to hero" kick-start. It's got all the materials and know-how you need to refill your empty cartridge the right way. First time.

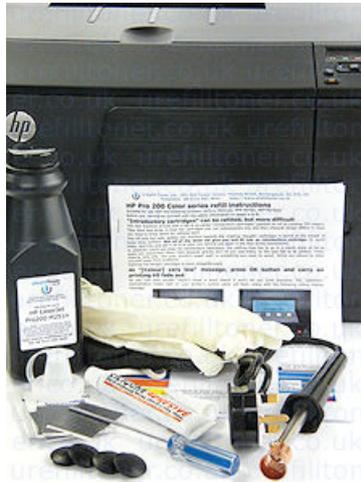
These instructions show you **how we did it**, not how we imagine it could be done. In the case of the HP Pro 200 that still sits in our office, we've successfully done this refill over 20 times. On many of those occasions, our own office staff did the refill in order to keep the office printing receipts and catalogues.

This document, which avoids refill disaster through detailed guidance on the **critical issue of when to refill**, contains all substantial information needed for a successful refill assuming you're taking advantage of U Refill Toner Ltd / <http://www.urefilltoner.co.uk/> products.

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Refills by you ... thanks to you

Thanks for refilling the toner cartridges in your printer. We invented "do-it-yourself" toner refills in 1992, "melt & pour" in 1996 and put "unplug & pour" into internet-speak in 2002. We've never tried to patent or otherwise restrict the use of these ideas.

If you liked our product, please recommend us to friends and colleagues. We've survived for over 20 years – fighting giant corporations that dwarf us – thanks to your custom and recommendation. No one here takes that, or you, for granted.

U Refill Toner. Now needed more than ever. Now refined more than ever.

- ✓ more than halve the cost
- ✓ halve CO₂
- ✓ stop being a doormat for big manufacturers

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*Original and largest selling
 do-it-yourself toner refill*