

Samsung ML-2240 refill instructions

Also suitable for ML-1640. Manufacturer part number for bought cartridge: MLT-D1082S.

Before use, familiarize with the safety data on pages 4 and 5.

Take maximum care when using a screwdriver as a lever. Use eye protection and gloves to guard against injury due to accidental slippage.

Print on ordinary paper, set type to "THICK"

This product will work optimally by deliberately setting paper type to "THICK", but continuing to print on **ordinary paper**. If this isn't done, you might be able to rub the image off the page due to poor bonding of the toner to the page fibres. Change the default setting through the control panel as follows:

Start > control panel > printers and faxes > open Samsung 2240/1640 > printer > printing preferences > paper tab > type option (will be on "printer default") > choose "thick" > click OK (will stay like that until changed again)

Correspondingly, if you actually want to print on something thick, or something that needs more heat, like labels, experiment with a setting slightly higher than the media you're actually printing on.

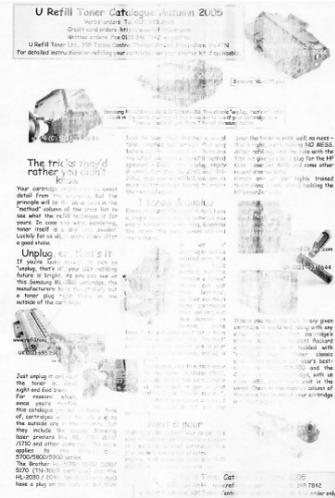
Allow toner settling time when refilling starter cartridge

The new machine arrives with a so-called "starter cartridge". It's the same as a normal cartridge for nearly all practical purposes but has around a third of the amount of toner in and so gives a third of the yield.

The starter cartridge's hopper has a smaller volume than the bought cartridge. Our toner refill will only just fit in. To avoid spillage while refilling the starter, pour in two stages, allowing the toner to settle for 2 minutes between stages.

Ignore "toner low" and "replace toner" messages, refill at fade out

Ignore any pop-up messages you get that mention "toner low" or "replace toner". Refill when the print actually starts to fade out due to lack of toner. Fade out develops **progressively** as shown in these three prints.



As you can see, the faded area gets wider and more pronounced with each print, but even on the last very faded page, the print at the edges is still the same blackness as on the first print. If you take out the cartridge and give it a shake at this point, perfect print will return for a few more prints – but then the fade out will return again. This pattern of progressively widening fade out bands which can be temporarily cured by shaking is the hallmark true fade out due to toner exhaustion.

Weighing can confirm fade-out

If you've got some scales, an empty state can be confirmed by weight:

Empty cartridge weight: 725g

If you're getting funny prints but the weight isn't close to 725g, toner exhaustion isn't the culprit.

Toner "exhausted" message stops printing altogether after:

Starter cartridge: approximately 2 refills

Bought cartridge: approximately 3 refills

In the near future we hope to be able to get a cartridge to print beyond the "exhausted" message by using a compatible chip. At the time of writing, no compatible chip is available, but if it comes good, we'll put it as a product for this machine on <http://urefilltoner.co.uk>

How to refill it

Take maximum care when using a screwdriver as a lever. Use eye protection and gloves to guard against injury due to accidental slippage.

1. Hold cartridge in position as shown with this edge closest to ceiling.
2. Shake cartridge vigorously from side to side for 10 seconds.
3. Find end of cartridge with either:
characteristic plate (starter cartridge) or
copper chips contacts showing (bought cartridge)



4. Take out 2 screws
5. Carefully lever off end plate.



6. Lever out plug. Slide screwdriver down side of plug to initiate movement.



7. With cap still on, shake toner bottle hard for 5 seconds.
8. Screw spout onto bottle and wrap sticky tape around join of spout to ensure no leakage of toner.

9. Hold cartridge at 45 degree angle with one hand. Use other hand for bottle.
10. Pour toner in two stages. Keeping bottle below horizontal, marry spout with hole. Up-end bottle into hole for a slow count of 3.



11. Rotate toner bottle back down to horizontal position, disengaging from cartridge as you do so.
12. Wait 2 minutes for toner to settle inside cartridge.
13. Shake bottle with finger firmly over end. Repeat pouring until no toner left in bottle.
14. Push orange plug firmly in with handle of screwdriver.
15. Screw end plate back into position.
16. Rock cartridge gently to even out toner in the cartridge.



Waste

The cartridge collects waste toner in a compartment which, in theory, could fill up completely and cause print problems.

In practice, we found that the waste is unlikely to fill up before the end of 3 refills (which is the maximum possible unless compatible chips become available). Based on experience with comparable cartridge designs, we think 5 refills should be possible with no waste worries. To future-proof this document, we're including full information about the waste and how to empty it if you want to go down that road.

The symptom of waste overflow is black "skid marks" down one side of the page (usually, but not always, the left side). If you seem to have that, try following these steps to empty the waste.

How to empty the waste

You need a vacuum with the "hairy" attachment on. Only use the vacuum near a toner cartridge with the hairy attachment on and only use for cleaning stray toner powder, not for sucking up the bulk of any big piles of toner.

1. Undo 2 screws.



2. Hold cartridge upside down as shown, unhinge and separate waste collector unit.



3. Hold slit upwards to keep waste in.
4. Shake out waste from waste unit straight into outside bin.
5. Applying virtually no pressure, clean up inner surface of waste collector surfaces of waste unit by vacuuming with hairy vacuum attachment. Take care not to damage delicate catcher blade.
6. Vacuum off outside surface of waste collector.
7. Re-hinge the waste section and replace the two screws.



Safety Data Samsung ML-2240 type toner powder

Not to be used by children. Avoid inhalation of product. Avoid eye and skin contact. Do not ingest.

1 Identification of the substance and the company

Product name	Samsung ML-2240 refill toner
Part no.	SA2240BOT
Supplier	U Refill Toner Ltd. Contact details as per page header

2 Composition

Ingredient name	CAS No.	% weight
Styrene acrylate copolymer blend	25036-16-2	45-60
Iron oxide	1317-61-9	25-35
Pigment	NA	0.1-0.2
Polypropylene	9003-07-0	1-4
Carbon black	1333-86-4	1-2

3 Hazards identification

Toner dust is a combustible powder the formation of an explosive dust-air mixture is possible. Toner dust may cause discomfort for the eyes and respiratory tract.

4 First aid measures

General	Get medical attention if any discomfort continues.
Inhalation	Move the exposed person to fresh air at once.
Skin	Remove affected person from source of contamination. Wash skin immediately with soap and water.
Eyes	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes.
Ingestion	Dilute stomach contents with water. If large quantity swallowed seek medical advice.

5 Fire fighting measures

Extinguishing media	Water spray, foam, water
Special fire fighting procedures	Avoid breathing fire vapours
Unusual fire & explosion hazards	Non-flammable, but when suspended in air is combustible as with most organic powders. Generates massive smoke during fire. Avoid all ignition sources.

6 Accidental release measures

Personal precautions during spill	Avoid breathing dust
Spill clean up methods	Avoid generation and spreading of dust. Shovel into dry containers. Cover and move the containers. Flush the area with water.

7 Handling and storage

Usage precautions	Use mechanical ventilation in case of handling which causes formation of dust.
Storage precautions	Keep in cool, dry, ventilated storage and closed containers. Keep in original container. Max. storage temperature 38°C.

8 Exposure controls and personal protection

Treat toner as a nuisance dust. Avoid eye and skin contact. Do not ingest. No special technical measures. Industrial hygiene: after skin contact wash with cold water and soap.

9 Physical and chemical properties

Appearance and odour	Black free flowing powder, faint odour
Solubility in water	Negligible.

10 Stability and reactivity

Thermal decomposition	Above 300°C
Hazardous reaction	none
Hazardous decomposition products	None at intended use
Combustion products	Carbon dioxide

11 Toxicological information

Threshold limits	No data
Routes of entry	
Eyes	Possible may cause slight discomfort
Inhalation	Possible may cause slight discomfort
Skin	None known, no adverse effects expected
Ingestion	Possible, considered harmless
Health hazards	None known
Carcinogenicity/mutagenicity	None found
Medical conditions aggravated by exposure	None known

12 Ecological information

Environmental hazards	Not regarded as dangerous for the environment. Not biodegradable.
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13 Disposal considerations

Disposal methods	Pack in dust proof containers to prevent dust exposure. Dispose of in accordance with Local Authority Requirements by landfill or incineration. Do not throw in open fires to prevent risk of dust explosion.
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14 Transport information

General	Not regulated
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15 Regulatory information

The product is not classed as a dangerous preparation according to European directives 67/548/EEC and 88/379. Therefore, indications of special risks or safety advice on the packaging are not prescribed.

16 Other information

Use	Dry powder ink for use in laser printers
Room ventilation	See operators manual or safety data sheet for printer

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.

All information offered is believed to be true and is offered for consideration in good faith. However, U Refill Toner Ltd gives no warranties, neither explicit nor implicit as to the completeness or accuracy of any information offered nor the ultimate safety of refilling toner cartridges in any manner described or suggested nor the ultimate safety or hazardousness of products supplied by U Refill Toner Ltd. The onus is on the purchaser to evaluate all possible risk, including the possible incompleteness or inaccuracy of currently available information, and by proceeding to use the refill product or products, the purchaser thereby assumes all risk of peril or injury howsoever arising.

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.



Please, tell three people what you've done

OK, we admit it. This is our begging act. Have you saved money by using our DIY kit? Did you feel a touch of pride as your cartridge *did* print again? Maybe you found some environmental satisfaction? Or perhaps you feel it should be refilled "because it's there". We sincerely hope we've helped float your boat in some way. And if so, then please help our voice in the wilderness and tell at least three people about what you did with your empty cartridge.

We all know a lot of people: at work, in the family and in clubs and groups. Why not make a point of telling just three of those people about what you did with your empty cartridge? Even if they don't have printers themselves, they probably know people that do.



Why not copy these instructions and FAX them to three work contacts? Why not make some photocopies and give them to people that you know use computers? Why not broadcast an email to your email pals? In our experience, people will probably thank you for getting organised to spread useful information and it enhances your (doubtless already legendary) image as someone who knows their stuff. A battered home world might just benefit from your efforts as well.



Don't forget

You can easily refill **desktop copier cartridges** by Canon, Sharp and Xerox. Plus enjoy more refilling success with mono and colour laser printers by Hewlett Packard, Brother, Canon, Epson, Lexmark, Konica Minolta, Samsung, Xerox and others.

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