

# Maintenance and servicing routine at printers and copiers

## Design and equipment

- Maintenance and servicing is performed by service technicians only. This includes handling toner.
- If you use toner, wear disposable nitrile gloves with at least performance level 2. In case of contamination, change gloves after 15 min at the latest, but also consider the information provided by the glove manufacturer.
- If you perform a cartridge change only, wearing gloves is not required.
- Spilled toner shall be wiped with a wet cloth.
- Toner waste and residues have to be disposed in closed containers.
- Many manufacturers offer to receive used cartridges. The recycling of cartridges by the manufacturer or a provider is preferred to the disposal as hazardous waste.
- During maintenance and servicing, a vacuum cleaner of the German type H and type B1 (or equivalent) is utilised. If fine dust persisting several minutes in the air is emitted, wear a respirator of the European standard FFP2 within EN 149. Do not use blowing or sweeping of the machines.
- Since toner may contain eye irritant additives, protective goggles (at least EN 166, field of use "large dust particles") are used.
- Only cleaning agents free of chlorinated hydrocarbon are applied.
- For short-term usage of additives (roller or plastic cleaners), disposable nitrile gloves with at least performance level 2 are utilised.
- For long-term usage (>15 min) as well as during spraying of solvent-based cleaning agents, respiratory protection (at least filter type A within EN 141) is worn taking into account the respective safety data sheet.
- Take safety data sheets, instruction manuals and technical data sheets into account.
- Gentle skin cleansing and protection products are present. For cleaning, a water-soluble cleansing agent is applied.
- A skin protection scheme informs about the application of skin agents (skin protection, cleansing and care).
- Skin agents are free of fragrance substances and preservation agents to avoid allergic reactions.

## Further requirements

- A good accessibility of the machines shall be present.
- An adequate ventilation according to the requirements of the German regulations on workplaces (Arbeitsstättenverordnung (ArbStättV)) shall be created. For this reason, windows or doors shall be opened and the ventilation system shall be switched on, respectively.
- The compliance with measures and the appropriate disposal of used cartridges, as well as the use of protective equipment and skin agents is checked regularly.
- Protective goggles and gloves are checked for damaged parts or inside pollution.
- The provided skin agents were tested by the manufacturer for their efficacy and harmlessness during proper use.
- The expiry date of the agents is respected.



**Further information**

- Safety data sheets for toner and cleansing agents
- Operating instructions or technical guidelines of the manufacturers of printers and printer cartridges

**Which information has to be included in the instruction manual?**

- The general measures of the instructions for use have to be regarded.
- Wear nitrile gloves – not required for cartridge change.
- Wear safety glasses (at least EN 166, field of use “large dust particles”).
- Wear respirator (such as FFP2 within EN 149) in case of strong toner particle release.
- Wear respiratory protection (at least filter type A within EN 141) in case of strong aerosol formation.
- Ensure that the room is well ventilated and that ventilation and exhaust systems work properly.
- Clean soiled skin areas with cold water and soap, since toner can get sticky under hot water.
- If toner has reached the eyes, clean them with cold water for at least 10 minutes. If indicated, turn to a medical doctor.
- If you swallowed toner, rinsing with a high amount of cold water helps. In case of indisposition, do not induce vomiting, but turn to a doctor and present him the safety data sheet.
- Check protective goggles and gloves for damaged parts or inside pollution.
- Keep unneeded containers closed.
- Regard the skin protection scheme. Cloths soaked with solvent-based cleaning agents are not put into the pocket, but kept in closed containers.

Developed by: