

Microwave Oven

User manual

MG23DG4524A***



SAMSUNG

Contents

Safety instructions **3**

Important safety instructions	3
General safety	6
Microwave operation precautions	7
Limited warranty	7
Product group definition	7

Installation **8**

Accessories	8
Correct Disposal of This Product (Waste Electrical & Electronic Equipment)	8
Installation site	9
Turntable	9

Maintenance **9**

Cleaning	9
Replacement (repair)	10
Care against an extended period of disuse	10

Oven features **10**

Oven	10
Control panel	11

Oven use **11**

How a microwave oven works	11
Checking that your oven is operating correctly	12
Setting the time	12
Cooking/Reheating	13
Power levels and time variations	13
Adjusting the cooking time	14
Stopping the cooking	14
Setting the energy save mode	14
Using the quick defrost features	15
Using the auto cook features	16
Using the keep warm features	20
Grilling	21
Combining microwaves and grill	21
Using Lock (3 sec) features	22
Using the deodorization features	22
Switching the beeper off	22

Cookware guide **23**

Cooking guide **24**

Troubleshooting and information code **32**

Troubleshooting	32
Information code	35

Technical specifications **35**

Safety instructions

IMPORTANT SAFETY INSTRUCTIONS

READ CAREFULLY AND KEEP FOR FUTURE REFERENCE.

WARNING: If the door or door seals are damaged, the oven must not be operated until it has been repaired by a competent person.

WARNING: It is hazardous for anyone other than a competent person to carry out any service or repair operation that involves the removal of a cover which gives protection against exposure to microwave energy.

WARNING: Liquids and other foods must not be heated in sealed containers since they are liable to explode.

WARNING: Only allow children to use the oven without supervision when adequate instructions have been given so that the child is able to use the oven in a safe way and understands the hazards of improper use.

This appliance is intended to be used in household only and it is not intended to be used such as:

- staff kitchen areas in shops, offices and other working environments;
- farm houses;

- by clients in hotels, motels and other residential environments;
- bed and breakfast type environments.

Only use utensils that are suitable for use in microwave ovens. When heating food in plastic or paper containers, keep an eye on the oven due to the possibility of ignition.

Do not use this appliance for other purposes than cooking. Drying of clothing and heating of warming pads, slippers, sponges, damp cloth and similar may lead to risk of injury, ignition or fire.

Use this appliance only for its intended use as described in the manual. Do not put corrosive chemicals or vapors in or on this appliance. This type of oven is specifically designed to heat, cook, or dry food.

It is not designed for industrial or laboratory use.

If smoke is observed (emitted), switch off or unplug the appliance and keep the door closed in order to stifle any flames.

Microwave heating of beverages can result in delayed eruptive boiling, therefore care must be taken when handling the container.

Safety instructions

The contents of feeding bottles and baby food jars shall be stirred or shaken and the temperature checked before consumption, in order to avoid burns.

Eggs in their shell and whole hard-boiled eggs should not be heated in microwave ovens since they may explode, even after microwave heating has ended.

The oven should be cleaned regularly and any food deposits removed.

Failure to maintain the oven in a clean condition could lead to deterioration of the surface that could adversely affect the life of the appliance and possibly result in a hazardous situation.

The microwave oven is intended to be used on the counter top (freestanding) use only, the microwave oven shall not be placed in a cabinet.

Metallic containers for food and beverages are not allowed during microwave cooking.

The care should be taken not to displace the turntable when removing containers from the appliance.

The appliance shall not be cleaned with a steam cleaner.

The appliance should not be cleaned with a water jet.

The appliance is not intended for installing in road vehicles, caravans and similar vehicles etc.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

This oven should be positioned proper direction and height permitting easy access to cavity and control area.

Before using the your oven first time, oven should be operated with the water during 10 minute and then used.

If the oven generates a strange noise, a burning smell, or smoke is emitted, unplug the power plug immediately and contact your nearest service center.

The microwave oven has to be positioned so that plug is accessible.

WARNING: When the appliance is operated in the combination mode, children should only use the oven under adult supervision due to the temperatures generated.

During use the appliance becomes hot. Care should be taken to avoid touching heating elements inside the oven.

WARNING: Accessible parts may become hot during use. Young children should be kept away.

Do not use harsh abrasive cleaners or sharp metal scrapers to clean the oven door glass since they can scratch the surface, which may result in shattering of the glass.

A steam cleaner is not to be used.

WARNING: Ensure that the appliance is switched off before replacing the lamp to avoid the possibility of electric shock.

The appliance must not be installed behind a decorative door in order to avoid overheating.

WARNING: The appliance and its accessible parts become hot during use.

Care should be taken to avoid touching heating elements.

Children less than 8 years of age shall be kept away unless continuously supervised.

CAUTION: The cooking process has to be supervised. A short term cooking process has to be supervised continuously.

The door or the outer surface may get hot when the appliance is operating.

The temperature of accessible surfaces may be high when the appliance is operating.

The surfaces are liable to get hot during use.

The appliances are not intended to be operated by means of an external timer or separate remote-control system.

Safety instructions

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children unless they are older than 8 and supervised.

Keep the appliance and its cord out of reach of children less than 8 years.

General safety

Any modifications or repairs must be performed by qualified personnel only. Do not heat food or liquids sealed in containers for the microwave function. Do not use benzene, thinner, alcohol, or steam or high-pressure cleaners to clean the oven.

Do not install the oven: near a heater or flammable material; locations that are humid, oily, dusty or exposed to direct sunlight or water; or where gas may leak; or an uneven surface.

This oven must be properly grounded in accordance with local and national codes. Regularly use a dry cloth to remove foreign substances from the power plug terminals and contacts.

Do not pull, excessively bend, or place heavy objects on the power cord. If there is a gas leak (propane, LP, etc) ventilate immediately. Do not touch the power cord.

Do not touch the power cord with wet hands.

While the oven is operating, do not turn it off by unplugging the power cord. Do not insert fingers or foreign substances. If foreign substances enter the oven, unplug the power cord and contact a local Samsung service centre.

Do not apply excessive pressure or impact to the oven.

Do not place the oven over fragile objects.

Ensure the power voltage, frequency, and current matches the product specifications.

Firmly plug the power plug into the wall socket. Do not use multiple plug adapters, extension cords, or electric transformers.

Do not hook the power cord on metal objects. Make sure the cord is between objects or behind the oven.

Do not use a damaged power plug, power cord, or loose wall socket. For damaged power plugs or cords, contact a local Samsung service centre.

Do not pour or directly spray water onto the oven.

Do not place objects on the oven, inside, or on the oven door.

Do not spray volatile materials such as insecticide on the oven.

Do not store flammable materials in the oven. Because alcohol vapours can contact hot parts of the oven, use caution when heating food or drinks containing alcohol. Children may bump themselves or catch their fingers on the door. When opening/closing the door, keep children away.

Microwave warning

Microwave heating of beverages may result in delayed eruptive boiling; always use caution when handling the container. Always allow beverages to stand at least 20 seconds before handling. If necessary, stir during heating. Always stir after heating.

In the event of scalding, follow these First Aid instructions:

1. Immerse the scalded area in cold water for at least 10 minutes.
2. Cover with a clean, dry dressing.
3. Do not apply any creams, oils, or lotions.

To avoid damaging the tray or rack, do not put the tray or rack in water shortly after cooking.

Do not use the oven for deep fat frying because the oil temperature cannot be controlled. This could result in a sudden boil over of hot oils.

Microwave oven precautions

Only use microwave-safe utensils. Do not use metallic containers, gold or silver trimmed dinnerware, skewers, etc.

Remove wire twist ties. Electric arcing may occur.

Do not use the oven to dry papers or clothes.

Use shorter times for small amounts of food to prevent overheating or burning.

Keep the power cord and power plug away from water and heat sources.

To avoid the risk of explosion, do not heat eggs with shells or hard-boiled eggs. Do not heat airtight or vacuum-sealed containers, nuts, tomatoes, etc.

Do not cover the ventilation slots with cloth or paper. This is a fire hazard. The oven may overheat and turn off automatically and will remain off until it cools sufficiently.

Always use oven mitts when removing a dish.

Stir liquids halfway during heating or after heating ends and allow the liquid stand at least 20 seconds after heating to prevent eruptive boiling.

Stand at arms length from the oven when opening the door to avoid getting scalded by escaping hot air or steam.

Do not operate the oven when it is empty. The oven will automatically shut down for 30 minutes for safety purposes. We recommend placing a glass of water inside the oven at all times to absorb microwave energy in case the oven is started accidentally.

Install the oven in compliance with the clearances in this manual. (See Installing your microwave oven.)

Use caution when connecting other electrical appliances to sockets near the oven.

Microwave operation precautions

Failure to observe the following safety precautions may result in harmful exposure to microwave energy.

- Do not operate the oven with the door open. Do not tamper with the safety interlocks (door latches). Do not insert anything into the safety interlock holes.
- Do not place any object between the oven door and front face or allow food or cleaner residue to accumulate on sealing surfaces. Keep the door and door sealing surfaces clean by wiping with a damp cloth and then with a soft, dry cloth after each use.
- Do not operate the oven if it is damaged. Only operate after it has been repaired by a qualified technician.

Important: the oven door must close properly. The door must not be bent; the door hinges must not be broken or loose; the door seals and sealing surfaces must not be damaged.

- All adjustments or repairs must be done by a qualified technician.

Limited warranty

Samsung will charge a repair fee for replacing an accessory or repairing a cosmetic defect if the damage to the unit or accessory was caused by the customer. Items this stipulation covers include:

- Door, handles, out-panel, or control panel that are dented, scratched, or broken.
- A broken or missing tray, guide roller, coupler, or wire rack.

Use this oven only for its intended purpose as described in this instruction manual. Warnings and Important Safety Instructions in this manual do not cover all possible conditions and situations that may occur. It is your responsibility to use common sense, caution, and care when installing, maintaining, and operating your oven.

Because these following operating instructions cover various models, the characteristics of your microwave oven may differ slightly from those described in this manual and not all warning signs may be applicable. If you have any questions or concerns, contact a local Samsung service centre or find help and information online at www.samsung.com.

Use this oven for heating food only. It is intended for domestic use only. Do not heat any type of textiles or cushions filled with grains. The manufacturer cannot be held liable for damage caused by improper or incorrect use of the oven.

To avoid deterioration of the oven surface and hazardous situations, always keep the oven clean and well maintained.

Product group definition

This product is a Group 2 Class B ISM equipment. The definition of group 2 which contains all ISM equipment in which radio-frequency energy is intentionally generated and/or used in the form of electromagnetic radiation for the treatment of material, and EDM and arc welding equipment.

For Class B equipment is equipment suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)



(Applicable in countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

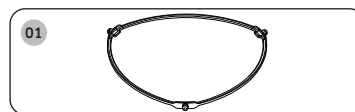
Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

For information on Samsung's environmental commitments and product regulatory obligations, e.g. REACH, visit our sustainability page available via www.samsung.com

Installation

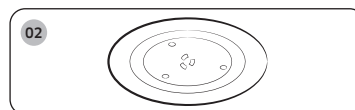
Accessories

Depending on the model that you have purchased, you are supplied with several accessories that can be used in a variety of ways.



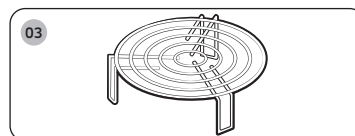
01 Roller ring, to be placed in the centre of the oven.

Purpose: The roller ring supports the turntable.



02 Turntable, to be placed on the roller ring with the centre fitting to the coupler.

Purpose: The turntable serves as the main cooking surface; it can be easily removed for cleaning.



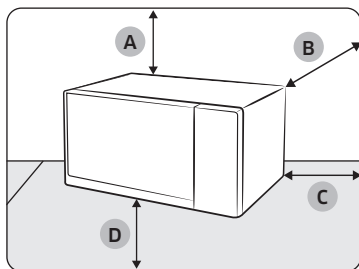
03 Grill rack, to be placed on the turntable.

Purpose: The metal rack can be used in grill and combination cooking.

NOTE

DO NOT operate the microwave oven without the roller ring and turntable.

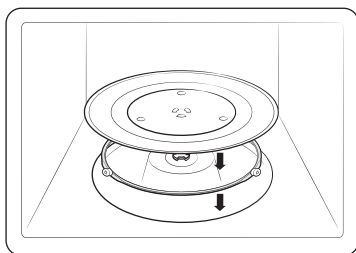
Installation site



- A. 20 cm above
- B. 0 cm behind
- C. 10 cm on the side
- D. 85 cm above the floor

- Select a flat, level surface approx. 85 cm above the floor. The surface must support the weight of the oven.
- We recommend installing the product so its back is flush with the wall, and leave minimum 10 cm on both sides and 20 cm above the product for ventilation.
- Do not install the oven in hot or damp surroundings, such as next to other microwave ovens or radiators.
- Conform to the power supply specifications of this oven. Use only approved extension cables if you need to use.
- Wipe the interior and the door seal with a damp cloth before using your oven for the first time.

Turntable



Remove all packing materials inside the oven. Install the roller ring and turntable. Check that the turntable rotates freely.

Maintenance

Cleaning

Clean the oven regularly to prevent impurities from building up on or inside the oven. Also pay special attention to the door, door sealing, and turntable and roller ring (applicable models only).

If the door won't open or close smoothly, first check if the door seals have built up impurities. Use a soft cloth in soapy water to clean both the inner and outer sides of the oven. Rinse and dry well.

To remove stubborn impurities with bad smells from inside the oven

1. With an empty oven, put a cup of diluted lemon juice on the centre of the turntable.
2. Heat the oven for 10 minutes at max power.
3. When the cycle is complete, wait until the oven cools down. Then, open the door and clean the cooking chamber.

⚠ CAUTION

- Keep the door and door sealing clean and ensure the door opens and closes smoothly. Otherwise, the oven's lifecycle may be shortened.
- Take caution not to spill water into the oven vents.
- Do not use any abrasive or chemical substances for cleaning.
- After each use of the oven, use a mild detergent to clean the cooking chamber after waiting for the oven to cool down.

Replacement (repair)

⚠ WARNING

This oven has no user-removable parts inside. Do not try to replace or repair the oven yourself.

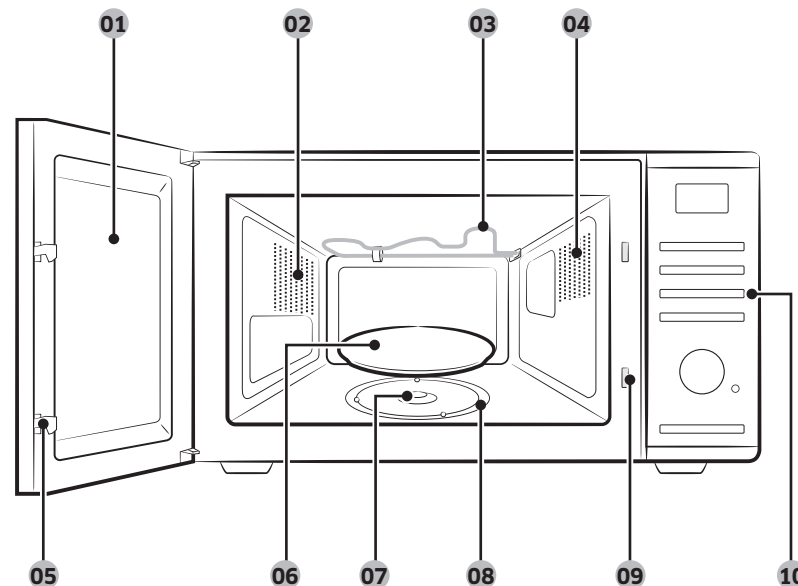
- If you encounter a problem with hinges, sealing, and/or the door, contact a qualified technician or a local Samsung service centre for technical assistance.
- If you want to replace the light bulb, contact a local Samsung service centre. Do not replace it yourself.
- If you encounter a problem with the outer housing of the oven, first unplug the power cord from the power source, and then contact a local Samsung service centre.

Care against an extended period of disuse

- If you don't use the oven for an extended period of time, unplug the power cord and move the oven to a dry, dust-free location. Dust and moisture that builds up inside the oven may affect the performance of the oven.

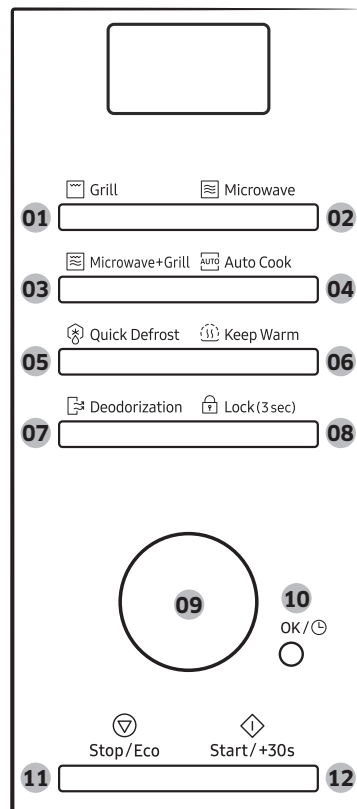
Oven features

Oven



- | | | |
|-------------------------|-----------------------------|----------------------------------|
| 01 Door | 02 Ventilation holes | 03 Heating element |
| 04 Light | 05 Door latches | 06 Turntable |
| 07 Coupler | 08 Roller ring | 09 Safety interlock holes |
| 10 Control panel | | |

Control panel



- 01 Grill Button
- 02 Microwave Button
- 03 Microwave+Grill Button
- 04 Auto Cook Button
- 05 Quick Defrost Button
- 06 Keep Warm Button
- 07 Deodorization Button
- 08 Lock(3sec) Button
- 09 Dial Knob (Weight/Serving/Time)
- 10 OK/Clock Button
- 11 Stop/Eco Button
- 12 Start/+30s Button

Oven use

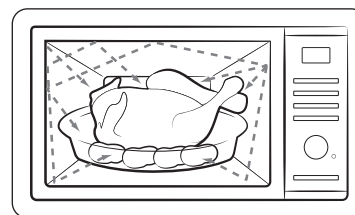
How a microwave oven works

Microwaves are high-frequency electromagnetic waves; the energy released enables food to be cooked or reheated without changing either the form or the colour.

You can use your microwave oven to:

- Defrost
- Reheat
- Cook

Cooking principle.



1. The microwaves generated by the magnetron reflected at cavity and are distributed uniformly as the food rotates on the turntable. The food is thus cooked evenly.
2. The microwaves are absorbed by the food up to a depth of about 1 inch (2.5 cm). Cooking then continues as the heat is dissipated within the food.
3. Cooking times vary according to the container used and the properties of the food:
 - Quantity and density
 - Water content
 - Initial temperature (refrigerated or not)

NOTE

As the centre of the food is cooked by heat dissipation, cooking continues even when you have taken the food out of the oven. Standing times specified in recipes and in this booklet must therefore be respected to ensure:

- Even cooking of the food right to the centre.
- The same temperature throughout the food.

Oven use

Checking that your oven is operating correctly

The following simple procedure enables you to check that your oven is working correctly at all times. If you are in doubt, refer to the section entitled "Troubleshooting" on the page 32 to 37.

NOTE

The oven must be plugged into an appropriate wall socket. The turntable must be in position in the oven. If a power level other than the maximum (100 % - 800 W) is used, the water takes longer to boil.

Open the oven door by pulling the handle on the upper or bottom side of the door. Place a glass of water on the turntable. Close the door.



Press the **START/+30s** button and set the time to 4 or 5 minutes, by pressing the **START/+30s** button the appropriate number of times.

Result: The oven heats the water for 4 or 5 minutes.
The water should then be boiling.

Setting the time

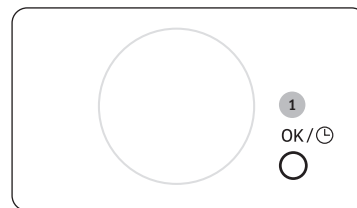
When power is supplied, "88:88" and then "12:00" is automatically displayed on the display.

Please set the current time. The time can be displayed in either the 24-hour or 12-hour notation. You must set the clock:

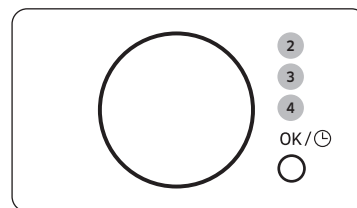
- When you first install your microwave oven
- After a power failure

NOTE

Do not forget to reset the clock when you switch to and from summer and winter time.



1. Press the **OK/Clock** button.



2. Set the 24-hour or 12-hour notation by turning the **Dial Knob**. And then press the **OK/Clock** button.
3. Turn the **Dial Knob** to set the hour. And then press the **OK/Clock** button.
4. Turn the **Dial Knob** to set the minute.



5. When the right time is displayed, press the **OK/Clock** button to start the clock.
Result: The time is displayed whenever you are not using the microwave oven.

Cooking/Reheating

The following procedure explains how to cook or reheat food.

NOTE

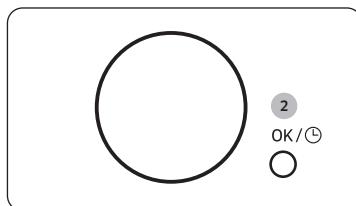
- ALWAYS check your cooking settings before leaving the oven unattended.
- The maximum **Microwave** time is 99 minutes.

Open the door. Place the food in the centre of the turntable. Close the door. Never switch the microwave oven on when it is empty.

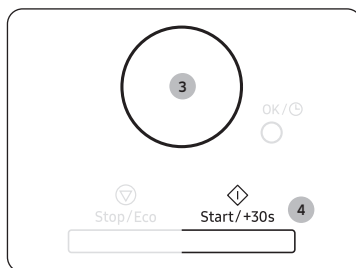


1. Press the **Microwave** button.

Result: The 800 W (Maximum cooking power) indications are displayed:
 (microwave mode)



2. Select the appropriate power level by turning the **Dial Knob**. (Refer to the power level table.) And then press the **OK/Clock** button.



3. Set the cooking time by turning the **Dial Knob**.

Result: The cooking time is displayed.

4. Press the **START/+30s** button.

Result: The oven light comes on and the turntable starts rotating. Cooking starts and when it has finished.

- 1) The oven beeps 4 times.
- 2) The end reminder signal will beep 3 times (once every minute).
- 3) The current time is displayed again.

Power levels and time variations

The power level function enables you to adapt the amount of energy dissipated and thus the time required to cook or reheat your food, according to its type and quantity. You can choose between six power levels.

Power level	Percentage (%)	Output (W)
HIGH	100	800
MEDIUM HIGH	75	600
MEDIUM	56	450
MEDIUM LOW	38	300
DEFROST	23	180
LOW	13	100

The cooking times given in recipes and in this booklet correspond to the specific power level indicated.

If you select a...	Then the cooking time must be...
Higher power level	Decreased
Lower power level	Increased

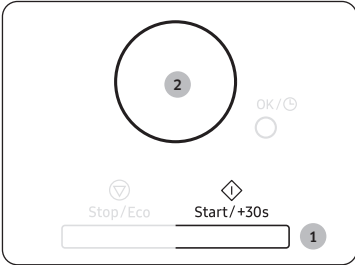
Oven use

Adjusting the cooking time

You can increase the cooking time by pressing the **START/+30s** button once for each 30 seconds to be added.

In Microwave, Grill or Microwave+Grill, pressing **START/+30s** button increases cooking time.

- Check how cooking is progressing at any time simply by opening the door
- Increase the remaining cooking time



Method 1

To increase the cooking time of your food during cooking, press the **START/+30s** button once for each 30 seconds that you wish to add.

- Example: To add three minutes, press the **START/+30s** button six times.

Method 2

Just turning **Dial Knob** to adjust cooking time.

- To increase cooking time, turn to right and to decrease cooking time, turn to left.

Stopping the cooking

You can stop cooking at any time so that you can:

- Check the food
- Turn the food over or stir it
- Leave it to stand

To stop the cooking...	Then...
Temporarily	Open the door or press the STOP/ECO button once. Result: Cooking stops. To resume cooking, close the door again and press the START/+30s button.
Completely	Press the STOP/ECO button once. Result: Cooking stops. If you wish to cancel the cooking settings, press the STOP/ECO button again.

Setting the energy save mode

The oven has an energy save mode.



- Press the **STOP/ECO** button.
Result: Display off.
- To remove energy save mode, open the door or press the **STOP/ECO** button and then display shows current time. The oven is ready for use.

NOTE

Auto energy saving function

If you do not select any function when appliance is in the middle of setting or operating with temporary stop condition, function is canceled and clock will be displayed after 25 minutes.

Oven Lamp will be turned off after 5 minutes with door open condition.

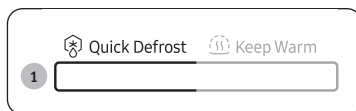
Using the quick defrost features

The **Quick Defrost** features enable you to defrost meat, poultry, fish, frozen vegetable and frozen bread. The defrost time and power level are set automatically. You simply select the programme and the weight.

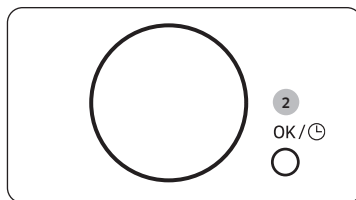
NOTE

Use only containers that are microwave-safe.

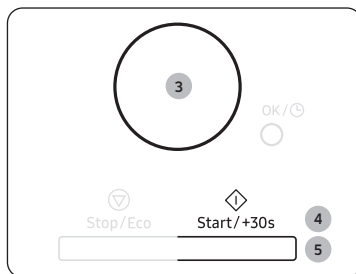
Open the door. Place the frozen food on a ceramic in the centre of the turntable. Close the door.



1. Press the **Quick Defrost** button.



2. Select the type of food that you are cooking by turning the **Dial Knob**. And then press the **OK/Clock** button.



3. Select the size of the serving by turning the **Dial Knob**. (Refer to the table on the side.)

4. Press the **START/+30s** button.

Result:

- Defrosting begins.
- The oven beeps through defrosting to remind you to turn the food over.

5. Press the **START/+30s** button again to finish defrosting.

Result:

- 1) The oven beeps 4 times.
- 2) The end reminder signal will beep 3 times (once every minute).
- 3) The current time is displayed again.

The following table presents the various **Quick Defrost** programmes, serving size, standing times and appropriate instructions. Remove all kind of package material before defrosting. Place meat, poultry, fish, vegetable and bread on a flat glass dish or ceramic plate.

Code/Food	Serving size (g)	Instructions
1 Meat	200-1500	Shield the edges with aluminium foil. Turn the meat over, when the oven beeps. This programme is suitable for beef, lamb, pork, steaks, chops, minced meat. Stand for 20-60 minutes.
2 Poultry	200-1500	Shield the leg and wing tips with aluminium foil. Turn the poultry over, when the oven beeps. This programme is suitable for whole chicken as well as for chicken portions. Stand for 20-60 minutes.
3 Fish	200-1500	Shield the tail of a whole fish with aluminium foil. Turn the fish over, when the oven beeps. This programme is suitable for whole fishes as well as for fish fillets. Stand for 20-60 minutes.
4 Frozen Vegetable	200-1500	Spread frozen vegetable evenly into a flat glass dish. Turn over or stir the frozen vegetable, when the oven beeps. This programme is suitable for all kind of frozen vegetable. Stand for 5-20 minutes.
5 Bread	200-1500	Put bread horizontally on a piece of kitchen paper and turn over, as soon as the oven beeps. Place cake on a ceramic plate and if possible, turn over, as soon as the oven beeps. (Oven keeps operating and is stopped, when you open the door.) This programme is suitable for all kinds of bread, sliced or whole, as well as for bread rolls and baguettes. Arrange bread rolls in a circle. This programme is suitable for all kinds of yeast cake, biscuit, cheese cake and puff pastry. It is not suitable for short/ crust pastry, fruit and cream cakes as well as for cake with chocolate topping. Stand for 10- 30 minutes.

Oven use

Using the auto cook features

The **Auto Cook** features has 32 pre-programmed cooking times. You do not need to set either the cooking times or the power level.
You can adjust the type of the serving by turning the **Dial Knob**.

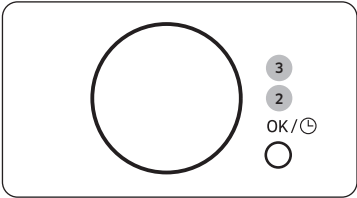
NOTE

Use only recipients that are microwave-safe.

First, place the food in the centre of the turntable and close the door.



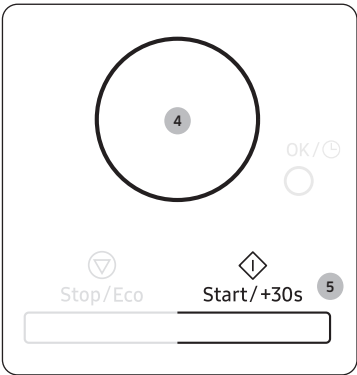
1. Press the **Auto Cook** button.



2. Turning the **Dial Knob** button to select the desired category. And then press **OK/Clock** button

- For more information, see the "Auto Cook programme description" on page 16 to 18

3. Select the type of food that you are cooking by turning the **Dial Knob**. And then press **OK/Clock** button.



4. Select the size of the serving by turning the **Dial Knob**.

- Depending on the selected menu, you may have only one weight option available to select.
- You do not have to select a weight for Home Dessert.

5. Press the **START/+30s** button.

Result: The food is cooked according to the pre-programmed setting selected.

- The oven beeps 4 times.
- The end reminder signal will beep 3 times (once every minute).
- The current time is displayed again.

The following table presents quantities and appropriate instructions about 32 pre-programmed cooking options. Those programmes are running with microwave energy only.

CAUTION

Use oven gloves when taking out food.

Auto Cook programme description

1. Healthy Cooking

The following table presents auto programmes for cooking, roasting, and baking. The table contains food quantities, weight ranges, and appropriate recommendations. Cooking modes and times have been pre-programmed for your convenience.

Code/Food	Serving size (g)	Instructions
1-1 Ready Meal (Chilled)	350	Put on a ceramic plate and cover with microwave cling film. This programme is suitable for meals consisting of 3 components (e.g. meat with sauce, vegetables and a side dishes like potatoes, rice or pasta). Stand for 2-3 minutes.
	450	
1-2 Vegetarian Meal (Chilled)	350	Put meal on a ceramic plate and cover with microwave cling film. This programme is suitable for meals consisting of 2 components (e.g. spaghetti with sauce or rice with vegetables). Stand for 2-3 minutes.
	450	
1-3 Broccoli Florets	250	Rinse and clean fresh broccoli and prepare florets. Put them evenly into a glass bowl with lid. Add 30 ml (2 tbsp) water when cooking for 250 g. Put bowl in the centre of turntable. Cook covered. Stir after cooking. Stand for 1-2 minutes.

Code/Food	Serving size (g)	Instructions
1-4 Sliced Carrots	250	Rinse and clean carrots and prepare even slices. Put them evenly into a glass bowl with lid. Add 30 ml (2 tbsp) water when cooking for 250 g. Put bowl in the centre of turntable. Cook covered. Stir after cooking. Stand for 1-2 minutes.
1-5 Green Beans	250	Rinse and clean green beans. Put them evenly into a glass bowl with lid. Add 30 ml (2 tbsp) water when cooking 250 g. Put bowl in the centre of turntable. Cook covered. Stir after cooking. Stand for 1-2 minutes.
1-6 Spinach	150	Rinse and clean spinach. Put into a glass bowl with lid. Do not add water. Put bowl in the centre of turntable. Cook covered. Stir after cooking. Stand for 1-2 minutes.
1-7 Corn on the Cob	250	Rinse and clean corn on the cob and put into an oval glass dish. Cover with microwave cling film and pierce film. Stand for 1-2 minutes.
1-8 Peeled Potatoes	250	Wash and peel the potatoes and cut into a similar size. Put them into a glass bowl with lid. Add 45-60 ml (3-4 tbsp) water. Put bowl in the centre of turntable. Cook covered. Stand for 2-3 minutes.
1-9 Brown Rice	125	Use a large glass ovenware dish with lid. Add double quantity of cold water (250 ml). Cook covered. Stir before standing time and add salt and herbs. Stand for 5-10 minutes.

Code/Food	Serving size (g)	Instructions
1-10 Wholemeal Macaroni	125	Use a large glass ovenware dish with lid. Add 500 ml hot boiling water, a pinch of salt and stir well. Cook uncovered. Stir before standing time and drain thoroughly afterwards. Stand for 1 minutes.
1-11 Quinoa	125	Use a large glass ovenware dish with lid. Add double quantity of cold water (250 ml). Cook covered. Stir before standing time and add salt and herbs. Stand for 1-3 minutes.
1-12 Bulgur	125	Use a large glass ovenware dish with lid. Add double quantity of cold water (250 ml). Cook covered. Stir before standing time and add salt and herbs. Stand for 2-5 minutes.
1-13 Vegetable gratin	500	Put the vegetables, such as precooked potato slices, courgette slices and tomatoes and sauce into a suitable sized glass pyrex dish. Add grated cheese on top. Put dish on the grill rack. Stand for 2-3 minutes.
1-14 Grilled tomatoes	400	Rinse and clean tomatoes, cut them into halves and put in an ovenware dish. Add grated cheese on top. Put dish on grill rack. Stand for 1-2 minutes.
1-15 Chicken Breasts	300	Rinse pieces and put on a ceramic plate. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 2 minutes.

Oven use

Code/Food	Serving size (g)	Instructions
1-16 Turkey Breasts	300	Rinse pieces and put on a ceramic plate. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 2 minutes.
1-17 Fresh Fish Fillets	300	Rinse fish and put on a ceramic plate, add 1 tbsp lemon juice. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 1-2 minutes.
1-18 Fresh Salmon fillets	300	Rinse fish and put on a ceramic plate, add 1 tbsp lemon juice. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 1-2 minutes.
1-19 Fresh Prawns	250	Rinse prawns on a ceramic plate, add 1 tbsp lemon juice. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 1-2 minutes.
1-20 Fresh Trout	200	Put 1 fresh whole fish into an ovenproof dish. Add a pinch salt, 1 tbsp lemon juice and herbs. Cover with microwave cling film. Pierce film. Put dish on turntable. Stand for 2 minutes.
1-21 Grilled fish	300	Brush skin of whole fish (trout or gilthead) with oil and add herbs and spices. Put fish side by side, head to tail on the grill rack. Turnover, as soon as the beep sounds. Stand for 3 minutes.
1-22 Salmon steaks	400	Put fish steaks evenly on the grill rack. Turnover, as soon as the beep sounds. Stand for 2 minutes.

2. Home Dessert

Code/Food	Serving Size	Instructions
2-1 Walnut Pound Cake	1 serving	Ingredients Flour 120 g, Butter 140 g, Black sugar 100 g, Egg 2 pcs., Walnut (Chopped) 50 g, Baking powder 4 g
		1. Combine a butter and black sugar in bowl. 2. Add egg and mix well. 3. Add a flour, baking powder and keep stirring. 4. Add a walnut and mix well. 5. Pour a mixture in greased glass pyrex(rectangle type - 22x12x7(WxDxH, cm). 6. Put the bowl in the microwave oven and select the Auto Cook [1-1]. 7. After cooking, stand for 2-3 minutes.
2-2 Banana Bread	1 serving (6 pcs.)	Ingredients Banana 3 pcs., Pancake mix 120 g, Milk 120 g, Egg 1 pc., Malt syrup 2 tbsp.
		1. Chop the banana. 2. Combine a pancake mix, milk, egg, malt syrup in bowl. 3. Add banana and mix well. 4. Pour a mixture in 6 paper cups. 5. Put paper cups in the microwave oven and select the Auto Cook [1-2]. 6. After cooking, stand for 2-3 minutes.
2-3 Sponge Cake	1 serving	Ingredients Flour 170 g, Butter 50 g, Sugar 150 g, Egg 3 pcs., Baking powder 10 g
		1. Combine a butter and sugar in bowl. 2. Add egg and mix well. 3. Add a flour, baking powder and keep stirring. 4. Pour a mixture in greased glass(Circle type). 5. Put the bowl in the microwave oven and select the Auto Cook [1-3]. 6. After cooking, stand for 2-3 minutes.

Code/Food	Serving Size	Instructions
2-4 Brownie	1 serving	Ingredients Flour 90 g, Butter(Melted) 100 g, Sugar 230 g, Egg 2 pcs., Cocoa power 40 g
		1. Combine a butter, beaten eggs, sugar in bowl. 2. Add a flour, cocoa powder and keep stirring. 3. Pour a mixture in greased glass pyrex(rectangle type - 22x12x7(WxDxH, cm). 4. Put the bowl in the microwave oven and select the Auto Cook [1-4]. 5. After cooking, stand for 20-30 minutes.
2-5 Egg Pudding	1 serving (3 pcs.)	Ingredients Milk 250 g, Sugar 40 g, Egg 2 pcs.
		1. Crack the two eggs into a bowl. Lightly beat the egg with a balloon whisk. Don't let the tip of the whisk leave the bottom of the bowl to avoid creating too much foam. 2. Combine milk, sugar in other bowl. 3. Add the milk to the beaten egg while whisking the mixture. 4. Sieve the egg mixture with a fine mesh strainer. Scrape off the bottom of the strainer with a spatula. Remove any foam on the surface with a spoon. 5. Pour the mixture into custard cups. 6. Put the cups in the microwave oven and select the Auto Cook [1-5]. 7. After cooking, refrigerate and serve.

Code/Food	Serving Size	Instructions
2-6 Chocolate Mug Cake	1 serving	Ingredients Butter 30 g, Sugar 60 g, Egg 1 pc., Heavy cream 40 g, Flour 25 g, Cocoa powder 15 g, Vanilla 1.5 g, Semi-sweet chocolate chips 50 g
		1. Combine the butter, egg and cream together in a mug until well combined. 2. Add the flour, sugar and keep stirring. 3. Add the cocoa, vanilla and stir until just combined. 4. Stir in the chocolate chips. 5. Put the mug(pyrex 500ml) in the microwave oven and select the Auto Cook [6]. 6. After cooking, stand for 2-3 minutes.
2-7 Mug Cake	1 serving	Ingredients Butter 30 g, Sugar 60 g, Egg 1 pc., Flour 50 g, Milk 30 g, Vanilla 6 g, Almond powder 3 g, Baking powder 1.5 g
		1. Combine the butter, egg and milk together in a mug(pyrex 500ml) until well combined. 2. Add the flour, sugar, baking powder and keep stirring. 3. Add the almond powder, vanilla and stir until just combined. 4. Put the mug(pyrex 500ml) in the microwave oven and select the Auto Cook [1-7]. 5. After cooking, stand for 2-3 minutes.

Oven use

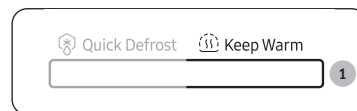
Code/Food	Serving Size	Instructions
2-8 Café Latte	1 serving	Ingredients Instant coffee powder 2 g, Water 50 g, Milk 125 g
		- Mix the coffee powder and water in mug. - Pour milk in other mug. - Put the coffee mixture in the microwave oven and select the Auto Cook [1-8]. - When the beeps, take mug out. - Put the milk in the microwave oven and press the START/+30s button. - After cooking, mix all well and serve.
2-9 Green Tea Latte	1 serving	Ingredients Green tea powder 6 g, Sugar 15 g, Milk 250 g
		- Mix all ingredients in mug. - Put the mug in the microwave oven and select the Auto Cook [1-9]. - After cooking, mix well and serve.
2-10 Milk Tea	1 serving	Ingredients Black tea bag 2 pcs., Water 60 g, Milk 125 g
		- Mix the black tea bag and water in mug. - Pour milk in other mug. - Put the tea mixture in the microwave oven and select the Auto Cook [1-10]. - When the beeps, take mug out. - Put the milk in the microwave oven and press the START/+30s button. - After cooking, mix all well and serve.

Using the keep warm features

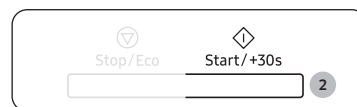
The **Keep Warm** feature keeps food hot until it's served. Use this function to keep food warm until ready to serve.

NOTE

- The **Keep Warm** time has been specified as 99 minutes.
- The maximum **Keep Warm** time is 99 minutes.



1. Press the **Keep Warm** button.



2. Press the **START/+30s** button.

Result: The 99 minutes is displayed.

- To stop warming the food, open the door or press **STOP/ECO** button.

NOTE

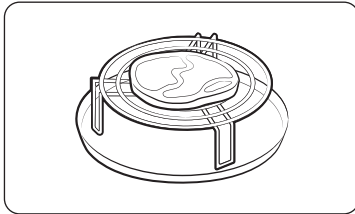
- Do not use this function to reheat cold foods. This programmes are for keeping food warm that has just been cooked.
- Do not recommend food being kept warm for too long (more than 1 hour), as it will continue to cook. Warm food spoils more quickly.
- Do not cover with lids or plastic wrap.
- Use oven gloves when taking out food.

Grilling

The grill enables you to heat and brown food quickly, without using microwaves.

NOTE

- Always use oven gloves when touching the recipients in the oven, as they will be very hot.
- You can get better cooking and grilling results, if you use the high rack.



1. Open the door and put the food on the rack and then close the door.

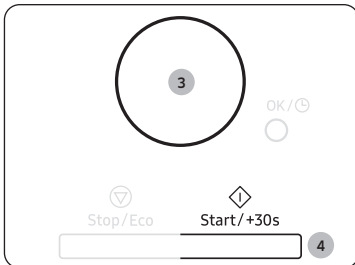


2. Press the **Grill** button.

Result: The following indications are displayed:



- You cannot set the temperature of the grill.



3. Set the grilling time by turning the **Dial Knob**.

- The maximum grilling time is 60 minutes.

4. Press the **START/+30s** button.

Result: Grilling starts.

- 1) The oven beeps 4 times.
- 2) The end reminder signal will beep 3 times (once every minute).
- 3) The current time is displayed again.

Combining microwaves and grill

You can also combine microwave cooking with the grill, to cook quickly and brown at the same time.

NOTE

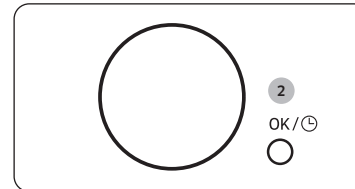
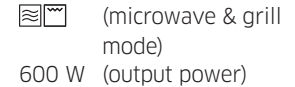
- ALWAYS use microwave-safe and oven-proof cookware. Glass or ceramic dishes are ideal as they allow the microwaves to penetrate the food evenly.
- ALWAYS use oven gloves when touching the recipients in the oven, as they will be very hot. You can improve cooking and grilling, if you use the high rack.

Open the door. Place the food on the rack best suited to the type of food to be cooked. Place the rack on the turntable. Close the door.



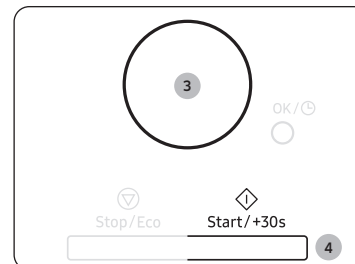
1. Press the **Microwave+Grill** button.

Result: The following indications are displayed:



2. Select the appropriate power level by turning the **Dial Knob**. (600 W, 450 W, 300 W.) And then press the **OK/Clock** button.

- You cannot set the temperature of the grill.



3. Set the cooking time by turning the **Dial Knob**.

- The maximum cooking time is 60 minutes.

4. Press the **START/+30s** button.

Result:

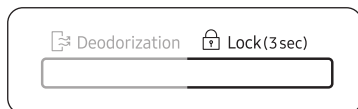
- Combination cooking starts.

- 1) The oven beeps 4 times.
- 2) The end reminder signal will beep 3 times (once every minute).
- 3) The current time is displayed again.

Oven use

Using Lock (3 sec) features

Your microwave oven is fitted with a special child lock programme, which enables the oven to be “locked” so that children or anyone unfamiliar with it cannot operate it accidentally.

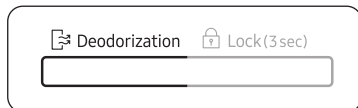


- To activate **Lock (3 sec)**, press the **Lock (3 sec)** button for 3 seconds.
 - The control panel is locked, and the control panel display shows “L”.
- To deactivate **Lock (3 sec)**, press the **Lock (3 sec)** button for 3 seconds.

Using the deodorization features

Use this features after cooking odorous food or when there is a lot of smoke in the oven interior.

First clean the oven interior.



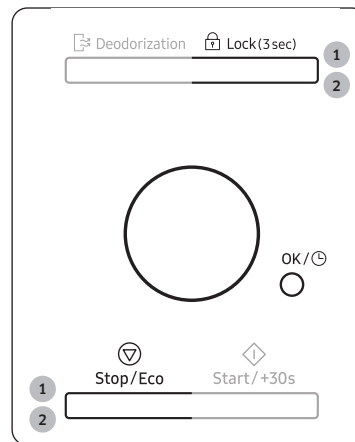
Press the **Deodorization** button after you have finished cleaning. As soon as you press the **Deodorization** button, the operation will start automatically. when it has finished, the oven beeps four times.

NOTE

- The deodorization time has been specified as 5 minutes. It increases by 30 seconds whenever the **START/+30s** button is pressed.
- The maximum deodorization time is 15 minutes.

Switching the beeper off

You can switch the beeper off whenever you want.



1. Press the **Lock (3 sec)** and **STOP/ECO** button at the same time.
Result: The oven does not beep to indicate the end of a function.
2. To switch the beeper back on, press the **Lock (3 sec)** and **STOP/ECO** button again at the same time.
Result: The oven operates normally.

Cookware guide

To cook food in the microwave oven, the microwaves must be able to penetrate the food, without being reflected or absorbed by the dish used.

Care must therefore be taken when choosing the cookware. If the cookware is marked microwave-safe, you do not need to worry.

The following table lists various types of cookware and indicates whether and how they should be used in a microwave oven.

Cookware	Microwave-safe	Comments
Aluminum foil	✓X	Can be used in small quantities to protect areas against overcooking. Arcing can occur if the foil is too close to the oven wall or if too much foil is used.
Crust plate	✓	Do not preheat for more than 8 minutes.
China and earthenware	✓	Porcelain, pottery, glazed earthenware and bone china are usually suitable, unless decorated with a metal trim.
Disposable polyester cardboard dishes	✓	Some frozen foods are packaged in these dishes.
Fast-food packaging		
• Polystyrene cups containers	✓	Can be used to warm food. Overheating may cause the polystyrene to melt.
• Paper bags or newspaper	X	May catch fire.
• Recycled paper or metal trims	X	May cause arcing.
Glassware		
• Oven-to-tableware	✓	Can be used, unless decorated with a metal trim.
• Fine glassware	✓	Can be used to warm foods or liquids. Delicate glass may break or crack if heated suddenly.
• Glass jars	✓	Must remove the lid. Suitable for warming only.

Cookware	Microwave-safe	Comments
Metal		
• Dishes	X	May cause arcing or fire.
• Freezer bag twist ties	X	
Paper		
• Plates, cups, napkins and kitchen paper	✓	For short cooking times and warming. Also to absorb excess moisture.
• Recycled paper	X	May cause arcing.
Plastic		
• Containers	✓	Particularly if heat-resistant thermoplastic. Some other plastics may warp or discolour at high temperatures. Do not use Melamine plastic.
• Cling film	✓	Can be used to retain moisture. Should not touch the food. Take care when removing the film as hot steam will escape.
• Freezer bags	✓X	Only if boilable or oven-proof. Should not be airtight. Prick with a fork, if necessary.
Wax or grease-proof paper	✓	Can be used to retain moisture and prevent spattering.

✓ : Recommended

✓X : Use caution

X : Unsafe

Cooking guide

Microwaves

Microwave energy actually penetrates food, attracted and absorbed by its water, fat and sugar content. The microwaves cause the molecules in the food to move rapidly. The rapid movement of these molecules creates friction and the resulting heat cooks the food.

Cooking

Cookware for microwave cooking:

Cookware must allow microwave energy to pass through it for maximum efficiency. Microwaves are reflected by metal, such as stainless steel, aluminium and copper, but they can penetrate through ceramic, glass, porcelain and plastic as well as paper and wood. So food must never be cooked in metal containers.

Food suitable for microwave cooking:

Many kinds of food are suitable for microwave cooking, including fresh or frozen vegetables, fruit, pasta, rice, grains, beans, fish, and meat. Sauces, custard, soups, steamed puddings, preserves, and chutneys can also be cooked in a microwave oven. Generally speaking, microwave cooking is ideal for any food that would normally be prepared on a hob. Melting butter or chocolate, for example (see the chapter with tips, techniques and hints).

Covering during cooking

To cover the food during cooking is very important, as the evaporated water rises as steam and contributes to cooking process. Food can be covered in different ways: e.g. with a ceramic plate, plastic cover or microwave suitable cling film.

Standing times

After cooking is over food the standing time is important to allow the temperature to even out within the food.

Cooking Guide for frozen vegetables

Use a suitable glass pyrex bowl with lid. Cook covered for the minimum time - see table. Continue cooking to get the result you prefer. Stir twice during cooking and once after cooking. Add salt, herbs or butter after cooking. Cover during standing time.

Food	Serving Size (g)	Power (W)	Time (min.)
Spinach	150	600	4½-5½
	Instructions Add 15 ml (1 tbsp) cold water. Stand for 2-3 minutes.		
Broccoli	300	600	9-10
	Instructions Add 30 ml (2 tbsp) cold water. Stand for 2-3 minutes.		
Peas	300	600	7½-8½
	Instructions Add 15 ml (1 tbsp) cold water. Stand for 2-3 minutes.		
Green Beans	300	600	8-9
	Instructions Add 30 ml (2 tbsp) cold water. Stand for 2-3 minutes.		
Mixed Vegetables (Carrots/Peas/Corn)	300	600	7½-8½
	Instructions Add 15 ml (1 tbsp) cold water. Stand for 2-3 minutes.		
Mixed Vegetables (Chinese Style)	300	600	8-9
	Instructions Add 15 ml (1 tbsp) cold water. Stand for 2-3 minutes.		

Cooking Guide for fresh vegetables

Use a suitable glass pyrex bowl with lid. Add 30-45 ml cold water (2-3 tbsp) for every 250 g unless another water quantity is recommended – see table. Cook covered for the minimum time – see table. Continue cooking to get the result you prefer. Stir once during and once after cooking. Add salt, herbs or butter after cooking. Cover during a standing time of 3 minutes.

Hint: Cut the fresh vegetables into even sized pieces. The smaller they are cut, the quicker they will cook.

Food	Serving Size (g)	Power (W)	Time (min.)
Broccoli	250	800	4-4½
	500		7-7½
	Instructions Prepare even sized florets. Arrange the stems to the centre. Stand for 3 minutes.		
Brussels Sprouts	250	800	5½-6½
	Instructions Add 60-75 ml (4-5 tbsp) water. Stand for 3 minutes.		
Carrots	250	800	4½-5
	Instructions Cut carrots into even sized slices. Stand for 3 minutes.		
Cauliflower	250	800	5-5½
	500		8½-9
	Instructions Prepare even sized florets. Cut big florets into halves. Arrange stems to the centre. Stand for 3 minutes.		
Courgettes	250	800	3½-4
	Instructions Cut courgettes into slices. Add 30 ml (2 tbsp) water or a knob of butter. Cook until just tender. Stand for 3 minutes.		

Food	Serving Size (g)	Power (W)	Time (min.)
Egg Plants	250	800	3½-4
	Instructions Cut egg plants into small slices and sprinkle with 1 tbsp lemon juice. Stand for 3 minutes.		
Leeks	250	800	4½-5
	Instructions Cut leeks into thick slices. Stand for 3 minutes.		
Mushrooms	125	800	1½-2
	250		3-3½
	Instructions Prepare small whole or sliced mushrooms. Do not add any water. Sprinkle with lemon juice. Spice with salt and pepper. Drain before serving. Stand for 3 minutes.		
Onions	250	800	5½-6
	Instructions Cut onions into slices or halves. Add only 15 ml (1 tbsp) water. Stand for 3 minutes.		
Pepper	250	800	4½-5
	Instructions Cut pepper into small slices. Stand for 3 minutes.		
Potatoes	250	800	4-5
	500		7½-8½
	Instructions Weigh the peeled potatoes and cut them into similar sized halves or quarters. Stand for 3 minutes.		
Turnip Cabbage	250	800	5-5½
	Instructions Cut turnip cabbage into small cubes. Stand for 3 minutes.		

Cooking guide

Cooking Guide for rice and pasta

- Rice:** Use a large glass pyrex bowl with lid - rice doubles in volume during cooking. Cook covered.
After the cooking time is over, stir before standing time and salt or add herbs and butter.
Remark: the rice may not have absorbed all water after the cooking time is finished.
- Pasta:** Use a large glass pyrex bowl. Add boiling water, a pinch of salt and stir well. Cook uncovered.
Stir occasionally during and after cooking. Cover during standing time and drain thoroughly afterwards.

Food	Serving Size (g)	Power (W)	Time (min.)
White Rice (Parboiled)	250	800	16-17
	Instructions Add 500 ml cold water. Stand for 5 minutes.		
Brown Rice (Parboiled)	250	800	21-22
	Instructions Add 500 ml cold water. Stand for 5 minutes.		
Mixed Rice (Rice + Wild Rice)	250	800	17-18
	Instructions Add 500 ml cold water. Stand for 5 minutes.		
Mixed Corn (Rice + Grain)	250	800	18-19
	Instructions Add 400 ml cold water. Stand for 5 minutes.		
Pasta	250	800	11-12
	Instructions Add 1000 ml hot water. Stand for 5 minutes.		

Reheating

Your microwave oven will reheat food in a fraction of the time that conventional ovens hobs normally take.
Use the power levels and reheating times in the following chart as a guide. The times in the chart consider liquids with a room temperature of about +18 to +20 °C or a chilled food with a temperature of about +5 to +7 °C.

Arranging and covering

Avoid reheating large items such as joint of meat – they tend to overcook and dry out before the centre is piping hot. Reheating small pieces will be more successful.

Power levels and stirring

Some foods can be reheated using 800 W power while others should be reheated using 600 W, 450 W or even 300 W.

Check the tables for guidance. In general, it is better to reheat food using a lower power level, if the food is delicate, in large quantities, or if it is likely to heat up very quickly (mince pies, for example).

Stir well or turn food over during reheating for best results. When possible, stir again before serving.

Take particular care when heating liquids and baby foods. To prevent eruptive boiling of liquids and possible scalding, stir before, during and after heating. Keep them in the microwave oven during standing time. We recommend putting a plastic spoon or glass stick into the liquids. Avoid overheating (and therefore spoiling) the food.

It is preferable to underestimate cooking time and add extra heating time, if necessary.

Heating and standing times

When reheating food for the first time, it is helpful to make a note of the time taken – for future reference.

Always make sure that the reheated food is piping hot throughout.

Allow food to stand for a short time after reheating - to let the temperature even out. The recommended standing time after reheating is 2-4 minutes, unless another time is recommended in the chart.

Take particular care when heating liquids and baby food. See also the chapter with the safety precautions.

Reheating liquids

Always allow a standing time of at least 20 seconds after the oven has been switched off to allow the temperature to even out. Stir during heating, if necessary, and ALWAYS stir after heating. To prevent eruptive boiling and possible scalding, you should put a spoon or glass stick into the beverages and stir before, during and after heating.

Reheating baby food

Baby food:

Empty into a deep ceramic plate. Cover with plastic lid. Stir well after reheating! Let stand for 2-3 minutes before serving. Stir again and check the temperature. Recommended serving temperature: between 30-40 °C.

Baby milk:

Pour milk into a sterilised glass bottle. Reheat uncovered. Never heat a baby's bottle with teat on, as the bottle may explode if overheated. Shake well before standing time and again before serving ! Always carefully check the temperature of baby milk or food before giving it to the baby. Recommended serving temperature: ca. 37 °C.

Remark:

Baby food particularly needs to be checked carefully before serving to prevent burns. Use the power levels and times in the next table as a guide lines for reheating.

Reheating liquids and food

Use the power levels and times in this table as a guide lines for reheating.

Food	Serving Size	Power (W)	Time (min.)
Drinks (Coffee, Tea and Water)	150 ml (1 cup) 250 ml (1 mug)	800	1-1½ 1½-2
	Instructions Pour into cup and reheat uncovered. Put cup/ mug in the centre of turntable. Keep in microwave oven during standing time and stir well. Stand for 1-2 minutes.		
Soup (Chilled)	250 g	800	3-3½
	Instructions Pour into a deep ceramic plate. Cover with plastic lid. Stir well after reheating. Stir again before serving. Stand for 2-3 minutes.		
Stew (Chilled)	350 g	600	5½-6½
	Instructions Put stew in a deep ceramic plate. Cover with plastic lid. Stir occasionally during reheating and again before standing and serving. Stand for 2-3 minutes.		
Pasta with Sauce (Chilled)	350 g	600	4½-5½
	Instructions Put pasta (e.g. spaghetti or egg noodles) on a flat ceramic plate. Cover with microwave cling film. Stir before serving. Stand for 3 minutes.		
Filled Pasta with Sauce (Chilled)	350 g	600	5-6
	Instructions Put filled pasta (e.g. ravioli, tortellini) in a deep ceramic plate. Cover with plastic lid. Stir occasionally during reheating and again before standing and serving. Stand for 3 minutes.		

Cooking guide

Food	Serving Size	Power (W)	Time (min.)
Plated Meal (Chilled)	350 g	600	5½-6½
	Instructions Plate a meal of 2-3 chilled components on a ceramic dish. Cover with microwave cling-film. Stand for 3 minutes.		

Reheating baby food and milk

Use the power levels and times in this table as guide lines for reheating.

Food	Serving Size	Power (W)	Time
Baby Food (Vegetables + Meat)	190 g	600	30 sec.
	Instructions Empty into ceramic deep plate. Cook covered. Stir after cooking time. Before serving, stir well and check the temperature carefully. Stand for 2-3 minutes.		
Baby Porridge (Grain + Milk + Fruit)	190 g	600	20 sec.
	Instructions Empty into ceramic deep plate. Cook covered. Stir after cooking time. Before serving, stir well and check the temperature carefully. Stand for 2-3 minutes.		
Baby Milk	100 ml	300	30-40 sec.
	200 ml		50 sec. to 1 min.
	Instructions Stir or shake well and pour into a sterilized glass bottle. Place into the centre of turn-table. Cook uncovered. Shake well and stand for at least 3 minutes. Before serving, shake well and check the temperature carefully. Stand for 2-3 minutes.		

Manual defrosting

Microwaves are an excellent way of defrosting frozen food. Microwaves gently defrost frozen food in a short period of time. This can be of great advantage, if unexpected guests suddenly show up.

Frozen poultry must be thoroughly thawed before cooking. Remove any metal ties and take it out of any wrapping to allow thawed liquid to drain away.

Put the frozen food on a dish without cover. Turn over half way, drain off any liquid and remove any giblets as soon as possible.

Check the food occasionally to make sure that it does not feel warm.

If smaller and thinner parts of the frozen food start to warm up, they can be shield by wrapping very small strips of aluminium foil around them during defrosting. Should poultry start to warm up on the outer surface, stop thawing and allow it to stand for 20 minutes before continuing.

Leave the fish, meat and poultry to stand in order to complete defrosting. The standing time for complete defrosting will vary depending on the quantity defrosted. Please refer to the table below.

Hint: Flat food defrosts better than thick and smaller quantities need less time than bigger ones. Remember this hint while freezing and defrosting food.

For defrosting of frozen food with a temperature of about -18 to -20 °C, use the following table as a guide.

Food	Serving Size	Power (W)	Time (min.)
Meat Minced Beef	250 g	180	6½-7½
	500 g		10-12
	250 g	180	7½-8½
Pork Steaks	Instructions Place the meat on a flat ceramic plate. Shield thinner edges with aluminium foil. Turn over after half of defrosting time! Stand for 5-25 minutes.		
Poultry Chicken Pieces	500 g (2 pcs)	180	14½-15½

Food	Serving Size	Power (W)	Time (min.)
Whole Chicken	900 g	180	28-30
	Instructions First, put chicken pieces first skin-side down, whole chicken first breast-side-down on a flat ceramic plate. Shield the thinner parts like wings and ends with aluminium foil. Turn over after half of defrosting time! Stand for 15-40 minutes.		
Fish Fish Fillets	250 g (2 pcs) 400 g (4 pcs)	180	6-7 12-13
	Instructions Put frozen fish in the middle of a flat ceramic plate. Arrange the thinner parts under the thicker parts. Shield narrow ends with aluminium foil. Turn over after half of defrosting time! Stand for 5-15 minutes.		
Fruits Berries	250 g	180	6-7
	Instructions Distribute fruits on a flat, round glass dish (with a large diameter). Stand for 5-10 minutes.		
Bread Bread Rolls (Each about 50 g) Toast/Sandwich German Bread (Wheat + Rye Flour)	2 pcs 4 pcs	180	½-1 2-2½
	250 g	180	4½-5
	500 g	180	8-10
	Instructions Arrange rolls in a circle or bread horizontally on kitchen paper in the middle of turntable. Turn over after half of defrosting time! Stand for 5-20 minutes.		

Grill

The grill-heating element is located underneath the ceiling of the cavity. It operates while the door is closed and the turntable is rotating. The turntable's rotation makes the food brown more evenly. Preheating the grill for 3-5 minutes will make the food brown more quickly.

Cookware for grilling:

Should be flameproof and may include metal. Do not use any type of plastic cookware, as it can melt.

Food suitable for grilling:

Chops, sausages, steaks, hamburgers, bacon and gammon rashers, thin fish portions, sandwiches and all kinds of toast with toppings.

Important remark:

Whenever the grill only mode is used, please remember that food must be placed on the high rack, unless another instruction is recommended.

Microwave + grill

This cooking mode combines the radiant heat that is coming from the grill with the speed of microwave cooking. It operates only while the door is closed and the turntable is rotating. Due to the rotation of the turntable, the food browns evenly. Three combination modes are available with this model:
600 W + Grill, 450 W + Grill and 300 W + Grill.

Cookware for cooking with microwaves + grill

Please use cookware that microwaves can pass through. Cookware should be flameproof. Do not use metal cookware with combination mode. Do not use any type of plastic cookware, as it can melt.

Cooking guide

Food suitable for microwaves + grill cooking:

Food suitable for combination mode cooking include all kinds of cooked food which need reheating and browning (e.g. baked pasta), as well as foods which require a short cooking time to brown the top of the food. Also, this mode can be used for thick food portions that benefit from a browned and crispy top (e.g. chicken pieces, turning them over half way through cooking). Please refer to the grill table for further details.

Important remark:

Whenever the combination mode (microwave + grill) is used, the food should be placed on the high rack, unless another instruction is recommended. Please refer to the instructions in the following chart.

The food must be turned over, if it is to be browned on both sides.

Grill Guide for frozen food

Use the power levels and times in this table as guide lines for grilling.

Frozen Food	Serving Size	Power	1 step (min.)	2 step (min.)
Bread Rolls (Each ca. 50 g)	2 pcs	MW + Grill	300 W + Grill	Grill only
	4 pcs		1-1½	1-2
	Instructions Arrange rolls in a circle on rack. Grill the second side of the rolls up to the crisp you prefer. Stand for 2-5 minutes.			
Baguettes + Topping (Tomatoes, Cheese, Ham, Mushrooms)	250-300 g (2 pcs)	450 W + Grill	8-9	-
	Instructions Put 2 frozen baguettes side by side on the rack. After grilling. Stand for 2-3 minutes.			
Gratin (Vegetables or Potatoes)	400 g	450 W + Grill	13-14	-
	Instructions Put frozen gratin into a small, round glass pyrex dish. Put the dish on the rack. After grilling. Stand for 2-3 minutes.			

Frozen Food	Serving Size	Power	1 step (min.)	2 step (min.)
Pasta (Cannelloni, Macaroni, Lasagne)	400 g	MW + Grill	300 W + Grill 18-19	Grill only 1-2
	Instructions Put frozen pasta into a small flat rectangular glass pyrex dish. Put the dish directly on the turntable. After grilling. Stand for 2-3 minutes.			
Chicken Nuggets	250 g	450 W + Grill	5-5½	3-3½
	Instructions Put chicken nuggets on the rack. Turn over after first time.			
Oven Chips	250 g	450 W + Grill	9-11	4-5
	Instructions Put oven chips evenly on baking paper on the rack.			

Grill Guide for fresh food

Preheat the grill with the grill-function for 3-4 minutes.

Use the power levels and times in this table as guide lines for grilling.

Fresh Food	Serving Size	Power	1 step (min.)	2 step (min.)
Toast Slices	4 pcs (each 25 g)	Grill only	6-8	4-5½
	Instructions Put the toast slices side by side on the rack.			
Bread Rolls (Already Baked)	2-4 pieces	Grill only	2-3	2-3
	Instructions Put bread rolls first with the bottom side up in a circle directly on the turntable.			

Fresh Food	Serving Size	Power	1 step (min.)	2 step (min.)
Grilled Tomatoes		MW + Grill	300 W + Grill	Grill only
	200 g (2 pcs)		4½-5½	2-3
	400 g (4 pcs)		7-8	
	Instructions Cut tomatoes into halves. Put some cheese on top. Arrange in a circle in a flat glass pyrex dish. Place it on the rack.			
Toast Hawaii (Ham, Pineapple, Cheese Slices)	2 pcs (300 g)	450 W + Grill	3½-4	-
	Instructions Toast the bread slices first. Put the toast with topping on the rack. Put 2 toasts opposite directly on the rack. Stand for 2-3 minutes.			
Baked Potatoes	250 g	600 W + Grill	4½-5½	-
	500 g		8-9	
	Instructions Cut potatoes into halves. Put them in a circle on the rack with the cut side to the grill.			
Chicken Pieces	450-500 g (2 pcs)	300 W + Grill	10-12	12-13
	Instructions Prepare chicken pieces with oil and spices. Put them in a circle with the bones to the middle. Put 1 chicken piece not into the centre of the rack. Stand for 2-3 minutes.			

Fresh Food	Serving Size	Power	1 step (min.)	2 step (min.)
Lamb Chops/Beef Steaks (Medium)	400 g (4 pcs)	Grill only	12-15	9-12
	Instructions Brush the lamb chops with oil and spices. Lay them in a circle on the rack. After grilling. Stand for 2-3 minutes.			
Pork Steaks		MW + Grill	300 W + Grill	Grill only
	250 g (2 pcs)		7-8	6-7
	Instructions Brush the pork steaks with oil and spices. Lay them in a circle on the rack. After grilling. Stand for 2-3 minutes.			
Baked Apples	1 apple (ca. 200 g)	300 W + Grill	4-4½	-
	2 apples (ca. 400 g)		6-7	
	Instructions Core the apples and fill them with raisins and jam. Put some almond slices on top. Put apples on a flat glass pyrex dish. Place the dish directly on the turntable.			
Roast Chicken		MW + Grill	450 W + Grill	300 W + Grill
	1200 g		22-24	23-25
	Instructions Brush chicken with oil and spices. Put chicken first breast side down, second breast side up on pyrex dish. Stand for 5 minutes after grilling.			

Tips and tricks

Melting crystallized honey

Put 20 g crystallized honey into a small deep glass dish.
Heat for 20-30 seconds using 300 W, until honey is melted.

Melting gelatine

Lay dry gelatine sheets (10 g) for 5 minutes into cold water.
Put drained gelatine into a small glass pyrex bowl.
Heat for 1 minute using 300 W.
Stir after melting.

Cooking glaze/icing (for cake and gateaux)

Mix instant glaze (approximately 14 g) with 40 g sugar and 250 ml cold water.
Cook uncovered in a glass pyrex bowl for 3½ to 4½ minutes using 800 W, until glaze/icing is transparent. Stir twice during cooking.

Cooking jam

Put 600 g fruits (for example mixed berries) in a suitable sized glass pyrex bowl with lid. Add 300 g preserving sugar and stir well. Cook covered for 10-12 minutes using 800 W.
Stir several times during cooking. Empty directly into small jam glasses with twist-off lids. Stand on lid for 5 minutes.

Cooking pudding/custard

Mix pudding powder with sugar and milk (500 ml) by following the manufacturers instructions and stir well. Use a suitable sized glass pyrex bowl with lid. Cook covered for 6½ to 7½ minutes using 800 W.
Stir several times well during cooking.

Browning almond slices

Spread 30 g sliced almonds evenly on a medium sized ceramic plate.
Stir several times during browning for 3½ to 4½ minutes using 600 W.
Let it stand for 2-3 minutes in the oven. Use oven gloves while taking out!

Troubleshooting and information code

Troubleshooting

If you have any of the problems listed below try the solutions given.

Problem	Cause	Action
General		
The buttons cannot be pressed properly.	Foreign matter may be caught between the buttons.	Remove the foreign matter and try again.
	For touch models: Moisture is on the exterior.	Wipe the moisture from the exterior.
	Child lock is activated.	Deactivate Child lock.
The time is not displayed.	The Eco (power-saving) function is set.	Turn off the Eco function.
The oven does not work.	Power is not supplied.	Make sure power is supplied.
	The door is open.	Close the door and try again.
	The door open safety mechanisms are covered in foreign matter.	Remove the foreign matter and try again.
The oven stops while in operation.	The user has opened the door to turn food over.	After turning over the food, press the START/+30s button again to start operation.

Problem	Cause	Action
The power turns off during operation.	The oven has been cooking for an extended period of time.	After cooking for an extended period of time, let the oven cool.
	The cooling fan is not working.	Listen for the sound of the cooling fan.
	Trying to operate the oven without food inside.	Put food in the oven.
	There is not sufficient ventilation space for the oven.	There are intake/exhaust outlets on the front and rear of the oven for ventilation. Keep the gaps specified in the product installation guide.
	Several power plugs are being used in the same socket.	Designate only one socket to be used for the oven.
There is a popping sound during operation, and the oven doesn't work.	Cooking sealed food or using a container with a lid may causes popping sounds.	Do not use sealed containers as they may burst during cooking due to expansion of the contents.
The oven exterior is too hot during operation.	There is not sufficient ventilation space for the oven.	There are intake/exhaust outlets on the front and rear of the oven for ventilation. Keep the gaps specified in the product installation guide.
	Objects are on top of the oven.	Remove all objects on the top of the oven.
The door cannot be opened properly.	Food residue is stuck between the door and oven interior.	Clean the oven and then open the door.

Problem	Cause	Action
Heating including the Warm function does not work properly.	The oven may not work, too much food is being cooked, or improper cookware is being used.	Put one cup of water in a microwave-safe container and run the microwave for 1-2 minutes to check whether the water is heated. Reduce the amount of food and start the function again. Use a cooking container with a flat bottom.
The thaw function does not work.	Too much food is being cooked.	Reduce the amount of food and start the function again.
The interior light is dim or does not turn on.	The door has been left open for a long time.	The interior light may automatically turn off when the Eco function operates. Close and reopen the door or press the STOP/ECO button.
	The interior light is covered by foreign matter.	Clean the inside of the oven and check again.
A beeping sound occurs during cooking.	If the Auto Cook function is being used, this beeping sound means it's time to turn over the food during thawing.	After turning over the food, press the START/+30s button again to restart operation.
The oven is not level.	The oven is installed on an uneven surface.	Make sure the oven is installed on flat, stable surface.
There are sparks during cooking.	Metal containers are used during the oven/thawing functions.	Do not use metal containers.
When power is connected, the oven immediately starts to work.	The door is not properly closed.	Close the door and check again.

Troubleshooting and information code

Problem	Cause	Action
There is electricity coming from the oven.	The power or power socket is not properly grounded.	Make sure the power and power socket are properly grounded.
1. Water drips. 2. Steam emits through a door crack. 3. Water remains in the oven.	There may be water or steam in some cases depending on the food. This is not an oven malfunction.	Let the oven cool and then wipe with a dry dish towel.
The brightness inside the oven varies.	Brightness changes depending on power output changes according to function.	Power output changes during cooking are not malfunctions. This is not an oven malfunction.
Cooking is finished, but the cooling fan is still running.	To ventilate the oven, the cooling fan continues to run for about 3 minutes after cooking is complete.	This is not an oven malfunction.
Turntable		
While turning, the turntable comes out of place or stops turning.	There is no roller ring, or the roller ring is not properly in place.	Install the roller ring and then try again.
The turn table drags while turning.	The roller ring is not properly in place, there is too much food, or the container is too large and touches the inside of the microwave.	Adjust the amount of food and do not use containers that are too large.
The turn table rattles while turning and is noisy.	Food residue is stuck to the bottom of the oven.	Remove any food residue stuck to the bottom of the oven.

Problem	Cause	Action
Grill		
Smoke comes out during operation.	During initial operation, smoke may come from the heating elements when you first use the oven.	This is not a malfunction, and if you run the oven 2-3 times, it should stop.
	Food is on the heating elements.	Let the oven cool and then remove the food from the heating elements.
	Food is too close to the grill.	Put the food a suitable distance away while cooking.
	Food is not properly prepared and/or arranged.	Make sure food is properly prepared and arranged.
Oven		
The oven does not heat.	The door is open.	Close the door and try again.
Smoke comes out during preheating.	During initial operation, smoke may come from the heating elements when you first use the oven.	This is not a malfunction, and if you run the oven 2-3 times, it should stop.
	Food is on the heating elements.	Let the oven cool and then remove the food from the heating elements.
There is a burning or plastic smell when using the oven.	Plastic or non heat-resistant cookware is used.	Use glass cookware suitable for high temperatures.

Problem	Cause	Action
There is a bad smell coming from inside the oven.	Food residue or plastic has melted and stuck to the interior.	Use the steam function and then wipe with a dry cloth. You can put a lemon slice inside and run the oven to remove the odour more quickly.
The oven does not cook properly.	The oven door is frequently opened during cooking.	If you open the door often, the interior temperature will be lowered and this may affect the results of your cooking.
	The oven controls are not correctly set.	Correctly set the oven controls and try again.
	The grill or other accessories are not correctly inserted.	Correctly insert the accessories.
	The wrong type or size of cookware is used.	Use suitable cookware with flat bottoms.

Information code

Information code	CAUSE	Action
C-d0	Control buttons are pressed over 10 seconds.	Clean the keys and check if there is water on the surface around key. If it occurs again, turn off the microwave oven over 30 seconds and try setting again. If it appears again, call your local SAMSUNG Customer Care Centre.

NOTE

If the suggested solution does not solve the problem, contact your local SAMSUNG Customer Care Centre.

Technical specifications

SAMSUNG strives to improve its products at all times. Both the design specifications and these user instructions are thus subject to change without notice.

Model	MG23DG4524A***
Power source	230 V ~ 50 Hz AC
Power consumption Maximum power Microwave Grill (heating element)	2400 W 1250 W 1150 W
Output power	100 W / 800 W - 6 levels (IEC-705)
Operating frequency	2450 MHz
Dimensions (W x H x D) Outside (Include Handle) Oven cavity	489 x 275 x 394 mm 330 x 211 x 324 mm
Volume	23 liter
Weight Net	13.0 kg approx.

* This product contains a light source of energy efficiency class <G>.

Please be advised that the Samsung warranty does NOT cover service calls to explain product operation, correct improper installation, or perform normal cleaning or maintenance.

QUESTIONS OR COMMENTS?

COUNTRY	CALL	OR VISIT US ONLINE AT
UK	0333 000 0333	www.samsung.com/uk/support
IRELAND (EIRE)	0818 717100	www.samsung.com/ie/support
GERMANY	06196 77 555 77	www.samsung.com/de/support
FRANCE	01 48 63 00 00	www.samsung.com/fr/support
SPAIN	91 175 00 15	www.samsung.com/es/support
PORTUGAL	210 608 098 Chamada para a rede fixa nacional Dias úteis das 9h às 20h	www.samsung.com/pt/support
LUXEMBURG	261 03 710	www.samsung.com/be_fr/support
NETHERLANDS	088 90 90 100	www.samsung.com/nl/support
BELGIUM	02-201-24-18	www.samsung.com/be/support (Dutch) www.samsung.com/be_fr/support (French)
NORWAY	21629099	www.samsung.com/no/support
DENMARK	707 019 70	www.samsung.com/dk/support
FINLAND	030-6227 515	www.samsung.com/fi/support
SWEDEN	0771-400 300	www.samsung.com/se/support
AUSTRIA	0800 72 67 864 (0800-SAMSUNG)	www.samsung.com/at/support
SWITZERLAND	0800 726 786	www.samsung.com/ch/support (German) www.samsung.com/ch_fr/support (French)
HUNGARY	0680SAMSUNG (0680-726-7864)	www.samsung.com/hu/support
CZECH	800 - SAMSUNG (800-726786)	www.samsung.com/cz/support
SLOVAKIA	0800 - SAMSUNG (0800-726 786)	www.samsung.com/sk/support
CROATIA	072 726 786	www.samsung.com/hr/support
BOSNIA	055 233 999	www.samsung.com/ba/support

COUNTRY	CALL	OR VISIT US ONLINE AT
North Macedonia	023 207 777	www.samsung.com/mk/support
MONTENEGRO	020 405 888	www.samsung.com/support
SLOVENIA	080 697 267 (brezplačna številka)	www.samsung.com/si/support
SERBIA	011 321 6899	www.samsung.com/rs/support
Kosovo	038 40 30 90	www.samsung.com/support
ALBANIA	045 620 202	www.samsung.com/al/support
BULGARIA	0800 111 31 - Безплатен за всички оператори *3000 - Цена на един градски разговор или според тарифата на мобилният оператор 09:00 до 18:00 - Понеделник до Петък	www.samsung.com/bg/support
ROMANIA	0800872678 - Apel gratuit *8000 - Apel tarifat în rețea Program Call Center Luni - Vineri: 9 AM - 6 PM	www.samsung.com/ro/support
ITALIA	800-SAMSUNG (800.7267864)	www.samsung.com/it/support
CYPRUS	8009 4000 only from landline, toll free	www.samsung.com/gr/support
GREECE	80111-SAMSUNG (80111 726 7864) from mobile and land line (+30) 210 6897691 from mobile and land line	www.samsung.com/gr/support
POLAND	801-172-678* * (opłata według taryfy operatora)	http://www.samsung.com/pl/support/
LITHUANIA	8-800-77777	www.samsung.com/lt/support
LATVIA	8000-7267	www.samsung.com/lv/support
ESTONIA	800-7267	www.samsung.com/ee/support
UKRAINE	0-800-502-000	www.samsung.com/ua/support
MOLDOVA	+373-22-667-400	www.samsung.com/ua/support/moldova

