

# Food Safety Information

## GUIDANCE NOTES ON THE USE OF MICROWAVE OVENS

These notes should be read in conjunction with any instructions issued by the manufacturer at the time of sale.

### 1. How the Microwave Oven heats your food

The microwave oven differs from an ordinary oven in that the microwaves cause the water particles contained in the food to vibrate rapidly. The resulting heat generated by friction cooks the food.

Microwaves are not radioactive, they are a form of electromagnetic energy similar to light energy. Microwaves do not remain in the oven after the machine has been switched off, neither do they remain in the food after cooking - they are converted into heat energy in the cooked food.

### 2. Safety Standards and Features

All new microwave ovens sold in the U.K. bearing the approval label of either the British Electrotechnical approvals Board or the Electricity Council will comply with the relevant British Standards Institute Specification as regards the safety of the appliance.

The safety features fitted to such ovens include:-

- a) Efficient door seals - to confine the microwaves to the oven.
- b) Interlock switches which cut off the microwaves automatically when the door release switch is depressed or the door is opened.

If these features are well maintained, your oven will remain entirely safe.

### 3. Care of Microwave Ovens

Leakage of microwave and the subsequent risk to users of the oven will only occur when the microwave oven is not properly maintained:-

**Doors** Should not be distorted or subjected to excessive strain. Should not be used as convenient shelves for pots or saucepans. Should only be opened by first disengaging the door release catch one is fitted. Should not be closed with excessive force.

**Seals** Should not come into contact with hot objects that could damage the material.  
Should not be damaged or cut.



Should be kept clean and free of food particles.  
Should not be repaired as a "DIY" job.  
Always contact a specialist firm if any repairs are necessary.

#### 4. Good Practice

- a. Electric connections should be made in accordance with safe practice. Damaged cables should be replaced and pieces of cable should not be joined together.
- b. The internal surfaces of the oven should be cleaned with water and mild detergent. Scouring pads or agents and steel-wool will damage the surfaces.
- c. Metal containers for food should not be used. In most cases metal containers cause damage to the oven.
- d. Remember that even though the Microwave do not heat up glass or china containers, the hot food will conduct heat to the container and it may become too hot to hold.
- e. Service contracts should be entered into with specialist firms to test and service ovens periodically. The firm will advise on the frequency required. It is particularly important that ovens be checked should they suffer excessive impact or are otherwise damaged.

#### 5. Food Safety

It is important to understand how the method of heating differs in a microwave oven to a conventional oven. The microwave heats food by the vibration of molecules throughout the food substance, and is more effective in foods containing more moisture than dry foods.

The time taken to reach a specific temperature will therefore vary with different foods. Guidelines are normally given in booklets which are supplied with each oven and should be followed.

The ovens will also vary in their efficiency, so that the time to heat food in one may not be effective in another.

High risk foods - i.e. meat, poultry and foods containing these products and which are heavily contaminated with bacteria - e.g. it has been standing at room temperature for a long time, will require heating for longer than usual in order to destroy the bacteria. It follows that even if a product feels hot enough to eat, it may not be safe.

It is therefore very important not to rely on a microwave oven to destroy food poisoning organisms, and to store foods at safe temperatures i.e. refrigerated below 8<sup>0</sup> C or frozen prior to heating or reheating in a microwave oven.

In addition to these points, remember to clean your microwave oven each time you use it, and make sure that no food scraps are left around the seals or in the oven area.