



SCHOTT  
CERAN®

The best solution  
for glass ceramic  
cooktop panels

Frequently Asked Questions



# INDEX

## Features

Raw materials	6
Manufacturing process	6
Thermal strength	7
Design	7
Heat conductivity	8
Residual heat display	9
Security	9
Temperature differences	9

## Usage

Cookware	10–11
Heating systems	12
Gas	12
Electro	12
Induction	12–13
Energy saving	12
Heat-up time	14
Customer service	15

## Care

Cleaning process	16
Cleaning agents	17
Milk boil over	18
Cleaning with induction system	18
Sugar chipping	18
Lime specks	19

## Introduction

### **SCHOTT CERAN® – Only SCHOTT offers the true original!**

Ever since SCHOTT began marketing the world's first glass ceramic cooktop in 1971, the CERAN® brand has enjoyed a level of success that few other products can lay claim to. It has become a symbol of contemporary cooking, as well as an indispensable kitchen furnishing element. CERAN® has been a registered trademark of SCHOTT since 1962. Its quality, durability and unmatched cooking performance have been put to the test a million times over. By purchasing a SCHOTT CERAN® glass ceramic cooktop, you have a true original in your kitchen.

### **Quality "Made in Germany"**

As a leader in technology and innovation, SCHOTT simply boasts quality "made in Germany". With patented high-tech procedures and state-of-the-art, resource-friendly production processes, the company is constantly setting the latest standards. High-quality glass ceramic can be recognized by the SCHOTT CERAN® logo – only products bearing this logo are real CERAN® cooktops.

### Your benefits at a glance

- Easy to clean
- Highly aesthetic
- Cooking safety
- Highly energy efficient
- Easy to use
- Exceptionally durable
- State-of-the-art technology
- Environmentally friendly
- Long service life

### Which cooktop manufacturers feature CERAN® cooktops?

Almost all European, North American and Asian appliance manufacturers have stoves with CERAN® cooktops in their product range. CERAN® by SCHOTT is available for built-in cookers and tabletop appliances, as well as for standalone cookers, and is offered for all forms of heating technology such as radiant electrical heat, gas and induction technology.



### Which SCHOTT CERAN® products are available in retail outlets?

- Black glass ceramic cooktops
- Transparent glass ceramic cooktops
- Glass ceramic cooktops for tabletop appliances
- Glass ceramic cooktops for professional use

CERAN® – versatile in design, form and size.

## Features

### **What are CERAN® cooktops made of?**

CERAN® cooktops, manufactured by SCHOTT in Mainz (Germany) are made of a special glass ceramic, a material with fascinating qualities. It mainly consists of natural raw materials, e. g. quartz sand that can be found in nearly endless quantities.

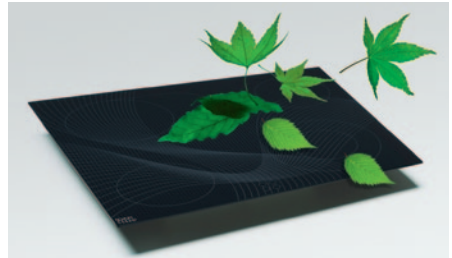
### **Is there such a thing as environmentally friendly glass ceramic?**

The new SCHOTT CERAN® is the first glass ceramic in the world produced without toxic heavy metals. With the product's unique composition of materials, SCHOTT already meets future EU ecological standards and proves its innovative strength as the European market leader once again. Within the

framework of SCHOTT's intensive research efforts, they have managed to optimize production processes to such an extent that the toxic heavy metals arsenic and antimony can be fully eliminated. As the first and only manufacturer in the world, SCHOTT offers the household appliance industry, as well as the consumer, environmentally sound glass ceramic cooktops, once again substantiating its leading position and commitment to the environment.

### What special properties does a CERAN® glass ceramic cooktop made by SCHOTT have?

This glass ceramic is extremely temperature-stable and resistant against abrupt temperature shocks up to 750 °C. It is entirely resistant against regular mechanical strains that occur in the kitchen and while cooking. The four millimeter thick CERAN® glass ceramic cooktop is extremely heat-permeable. Because of its low transverse heat conductivity, neighboring areas of the cooking zone stay relatively cool and the heat is transmitted directly to pots and pans. This provides considerable protection against any potential burns and accidents and notably limits unnecessary loss of energy.



### How many different cooktop panel designs are available with CERAN®?

CERAN® cooktops are currently available in more than 1,000 different designs. In addition, attractive multicolor decorations are available by combining colors from a total of 30 different colors on black glass ceramic. With the transparent CERAN® glass ceramic cooktop, SCHOTT offers an elegant product alternative to the classic black glass ceramic cooktop.

With its elegant appearance, particularly suited for induction cookers, it turns the stove into the centerpiece of any modern kitchen. Available in metallic and grey colors, it is fully in sync with the very latest in appliance and kitchen trends.

Your appliance retailer can offer you a full overview of the entire product range. This, however, depends on the appliance manufacturer and their product range and design offering.

### **Is the entire CERAN® cooktop heated when cooking?**

No. Due to its low transverse heat conductivity, only the heating elements/ cooking zones are heated. All unheated zones remain relatively cool.

Also working surfaces and furniture elements remain cool due to this very same reason, offering additional protection against any potential burns.

The increasingly popular induction heating technology is unique. An electromagnetic field directly below the CERAN® cooktop generates heat directly in the pot or pan and not on the cooking surface itself. Therefore there is virtually no heat transmission to the surrounding cooking zones. Only the heated pot or pan emits heat to the surrounding cooking zones. Nothing happens with the pot – the cooking zone stays cold. This offers additional protection against burns, in particular for families with small children. A further safety bonus!



### **What is the residual heat display for?**

The residual heat display points out any hot cooking zones and prevents burns and injuries. It also helps save energy as it shows which cooking zones have enough residual heat left for further cooking at low temperatures or to keep a dish warm.

CERAN® glass ceramic cooktops with induction technology go by the principle: “fast on, fast off”. Residual heat without the supply of additional energy in this sense, as is the case with conventional electric cookers, is therefore not possible.

### **What happens if a pot slips out of my hand?**

CERAN® cooktops are extremely robust. The unique material properties of glass-ceramic make the cooktop resistant against regular mechanical strains that occur in the kitchen and while cooking, e. g. tilting or falling pots.

### **What happens if something cold is poured onto the hot cooktop?**

Glass ceramic is totally impervious to abrupt temperature shocks, such as those caused by ice cubes or cold water on a hot cooking zone. The standards of all pertinent norms are complied with in this respect.

## Usage

### **Does CERAN® require any special cookware?**

Optimal results during cooking, frying, steaming, etc. can be achieved with cookware made of stainless steel or enameled steel. We recommend a base thickness of 2–3 mm for enameled steel and 4–6 mm for stainless steel cookware with sandwich bottom. Induction cooking generally only functions with ferromagnetic cookware. For years now, quality cookware has been manufactured exclusively with induction-suitable bases. You can determine whether your pots and pans are induction-capable simply by holding a magnet to the pot. If it “sticks”, the pot can be used on an induction cooker. Please also only use

cookware with smooth bases in order to prevent any damage to the surface of the cooker.

### **Which type of cookware is not suitable?**

Glass ceramic cookware as it does not conduct heat well and is therefore less suitable for use on CERAN® cooktops. Pans with copper or aluminum bases are also not suitable for cooking as these may leave residues which are very difficult to remove. If aluminum residues are not removed with a suitable cleaning agent immediately after cooking, they may leave permanent burning stains and make the appearance of the cooktop less attractive.

### Can pots be placed onto the cooker incorrectly?

Due to the cooker's level surface, pots and pans are always placed stably onto the surface without any risk of tipping over. In order to prevent any unnecessary loss of energy, the cooking zone diameter should be identical to the diameter of the base of the cookware. Cookers designed for gas technology use special extensions for the gas burner to prevent the pot or pan from tipping over.

### Why do cookware bottoms need to be clean and dry?

The bottom of the cookware should be clean, dry and ridge-free to prevent any residue from burning onto the cooktop panel. This prevents any potential unsightly scratches and deposits (such as lime specks).



### Can CERAN® cooktops overheat?

No. An integrated temperature limiter automatically deactivates the heating elements when a certain safety temperature has been exceeded. The final temperature setting, however, is made by the cooker manufacturer.

### **What is the best heating system for a cooker with a CERAN® cooktop?**

That depends on cooking style, personal preferences and budget. The most common systems are cookers with electrical radiant heating elements which offer extreme diversity in terms of size and design. If gas and electrical connections are in place, radiant heating and gas heating can be combined in one single cooker.

### **CERAN® with induction**

CERAN® cooktops with induction heating are becoming more and more popular among consumers. This technology heats the ferromagnetic cookware through magnetic vibrations. The advantage: The cooking zone is only heated by the heat returned by the pot, which is safe and also prevents any food or liquids that have boiled over from burning onto the cooking surface.

### **CERAN® with electrical heating technology**

The most common systems for CERAN® glass ceramic cooktops are cookers with electrical radiant heating elements. These are easily recognized by their red glowing cooking zones. They offer, among other things, the benefit of residual heat, easy cleaning, and energy efficient cooking.

### **CERAN® with gas heating technology**

Gas heating with an open burner on a CERAN® cooktop. Countless chefs swear by this style of cooking. Gas enables accurate cooking and responds quickly to changes in temperature – similar to that of induction heating technology.

### **How does the CERAN® cooktop with induction technology work?**

Induction cookers work completely differently to conventional electric

cookers. The difference becomes apparent as soon as you switch on the cooking zone. With induction cookers no heating elements start glowing. However, when you place a pot containing food or liquid on the cooking field, heat arises at the exact spot it is needed: at the bottom of the pot. A current-carrying coil is located beneath the cooktop that generates an alternating magnetic field. This magnetic field induces eddy currents in special cookware made of ferromagnetic material, which heats the metal of the pot and then its contents by heat transferal. The benefits of this technology are the precise dosage of heat supply and quick responses to any changes in settings. Under normal circumstances the cooking surface remains relatively cool, as the surface itself does not heat up. On top of that, a CERAN® cooktop with induction technology is much easier to clean and its elegant appearance is very aesthetically pleasing.

However, induction cooktops can reach considerably high temperatures. High-performance systems or an empty cooking pot can reach temperatures of more than 500 °C. One can therefore only use the term “cold cooking” in a certain sense.

### **What do I have to take into consideration when cooking with induction technology?**

The risk of burning oneself on a cooking zone after removing a pot or pan is reduced considerably through the lower glass ceramic temperatures. However, there is still a risk as the cooking zones are only active when a pot is placed on them. If the pot is removed, the energy supply is automatically disabled (inherent cookware recognition). The energy supply to the cookware can be activated and deactivated immediately. There is no post-heating or pre-heating as is the case with electrical radiant heating systems.

### **What heat-up times do CERAN® cooktops achieve?**

Heat-up times with CERAN® glass-ceramic cooktops are principally shorter than with traditional cooktops.

The supply of energy via heat radiation and heat conduction significantly influences heat-up times. This has been considerably optimized with the good adjustment of radiant heating elements, sensitive control technology and glass-ceramic.

Heat-up times are directly related to the suitability and the quality of the cookware. Stainless steel and enameled steel cookware are most suitable. The bottom of the pot or pan should be flat when heated and thick enough in the case of stainless steel products. Heat-up times for cookers with induction technology are shorter depending on their capacity in

comparison to the well-known electric and gas cookers. A further benefit is the quick response time when temperature settings are changed. The excellent controllability of the desired cooking temperature is achieved due to the fact that the energy goes directly into the pot.

### **How can you tell if the cooking zone has cooled off?**

The heat indicators in most cooking fields continue to glow red until the cooking surface has cooled down to hand temperature. Induction heating behaves similarly to radiant heating systems. The warning lamp is regulated by a timing circuit which, depending on cooking time, is shorter with induction cooktops than with radiant heating cooktops. Please be aware that with gas applications, the respective pot extensions can tend to be very hot depending on cooking time.

### **What should I do if the CERAN® cooktop breaks?**

Fortunately, this ever happens. As specified in the instruction manual of the respective appliance, you should contact the manufacturer's customer service department immediately. Your specialist dealer is also a further point of contact. Under no circumstances should you continue to use the cooktop.

Tip: Heavy objects such as salt shakers or glasses should be stored in a drop-resistant location. You can find the latest list of customer service points, listed by manufacturer, on our website at [www.schott-ceran.com](http://www.schott-ceran.com).

### **How do you remove "chipping" to the surface caused by sugar?**

Unfortunately, such damaged spots cannot be individually repaired. Sugar chipping however does not impair the

functionality of the CERAN® cooktop. This is merely a cosmetic fault. Should the chippings become too annoying, the entire glass ceramic cooktop can be exchanged by the customer service department of the respective stove manufacturer.

You can find the latest list of customer service points, listed by manufacturer, on our website at [www.schott-ceran.com](http://www.schott-ceran.com).

### **What happens if the surface has a metallic shine?**

Some cookware bottoms can leave behind spots with a metallic shine. They can be easily removed with a cleaner suitable for use on CERAN® cooktops.

## Care

### How do I care for my CERAN® cooktop properly?

In order to prolong the enjoyment and life of your beautiful and practical cooktop, we kindly ask you to take note of the following tips:

Please remove all excessive dirt and food scraps from the CERAN® cooktop with a cleaning scraper first.

Apply a few drops of suitable cleaner to the cold CERAN® cooktop and rub it onto the cooktop with a piece of kitchen paper or a clean cloth.

Wipe off the wet CERAN® cooktop and dry it off with a clean towel.

The following applies for most types of soiling to your SCHOTT CERAN® cooktop that occur when cooking: sponge it.

Minor soiling is easily washed away with just a few drops of a suitable cleaner and a sponge. SCHOTT recommends for their CERAN® cooktops a special glass ceramic sponge by Vileda – Glitzi for CERAN®.

Clean your CERAN® cooktop on a regular basis, preferably after each cooking session.



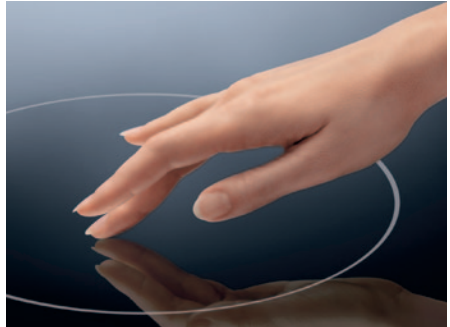
### Which cleaning utensils are not suitable?

Under no circumstances should you use abrasive sponges or abrasive cleaners. Chemically aggressive cleaners such as oven sprays or stain removers are also unsuitable.

### Which products are suitable for cleaning CERAN® cooktops?

SCHOTT tests a variety of special cleaners in terms of their suitability for glass-ceramic cooktops and contractually ensures their recipes. You can recognize such products by the special SCHOTT seal on the product container.

We have published a list of suitable cleaners and cleaning agents against sugar chipping in an instruction manual and on our website at [www.schott-ceran.com](http://www.schott-ceran.com).



We would be happy to send a hard copy of the manual to you free of charge via SCHOTT AG,  
Home Tech,  
Hattenbergstraße 10,  
55122 Mainz,  
Germany.

All of the cleaning products listed can be purchased from well-stocked retailers.

### **What happens if milk boils over?**

If milk should happen to boil over or is just about to boil over, quickly push the pot onto the unheated part of the cooktop. Cleaning is very simple: First remove the burnt-on residues with a cleaning scraper while the cooktop is still hot. Then clean the cold cooktop with a suitable cleaner, wipe wet and dry off with a clean towel.

With induction heating technology, only a small amount of radiated heat occurs around the cooking zone. This is why food and liquids are less readily burnt with induction heating in comparison to other forms of heating (e. g. electric).

### **Are there any benefits when cleaning cooktops with induction technology?**

Cleaning the glass ceramic is much simpler as hardly any burning occurs as a result of the lower glass ceramic temperatures. Should anything boil over, it can be very easily removed with a paper towel.

### **What happens if sugar or sugary foods come into contact with the CERAN® cooktop?**

Hot sugar caramelizes at a temperature of 200 °C. When it cools off, the sticky caramel contracts. This is not the case with glass ceramic which, due to its special composition, neither contracts nor expands. Removing the cooled caramel can leave very small surface defects, so-called “sugar chipping,” on the cooktop.

Handled properly, sugar should not pose a problem to the CERAN® cooktop. The sugar should be removed directly with a cleaning scraper.

### **What do I do if things accidentally melt onto the hot cooktop?**

Should objects made of plastic, aluminum foil, sugar or sugary products melt onto the hot CERAN® cooktop, immediately remove it from the heated zone with a cleaning scraper. This prevents damages that may occur to the surface.

### **How can you avoid lime specks on the surface?**

Lime specks can be avoided by only using dry cookware on the CERAN® cooktop. Lime specks can be generally removed with a suitable cleaning agent.

### **What do I do if the decor has become stained?**

“Stains” found on the decor are often signs of wear and tear which only occur if the CERAN® cooktop has been cleaned with unsuitable, aggressive cleaners (e. g. abrasives, oven sprays) or hard sponges. Unfortunately, they cannot be repaired. This is why it is important to use only suitable cleaning utensils. Only in this way can stains and decor damages be prevented.

Home Tech

**SCHOTT AG**

Hattenbergstrasse 10

55122 Mainz

Germany

Phone +49 (0)6131/66-0

Fax +49 (0)3641/2888-9019

[info.ceran@schott.com](mailto:info.ceran@schott.com)

[www.schott.com](http://www.schott.com)