





Matt Black Enamel Interiors

Matt Black (= achromatic silk-) enamel is applied to the interiors of Grills, Frypans, Skillets, Woks, Bouillabaise Pots, Sauté Pans and all Products that black on the outside. It is robust and hardwearing that will gradually, with use, take on its own surface 'patina' and is ideal for searing and browning. It is recommended that all pieces with matt black (achromatic silk-) enamel inside should be seasoned before use.

How to Season?

- 1. Wash the piece in hot soapy water and scrub gently to remove any manufacturing residues.
- 2. Dry thoroughly.
- 3. Place the piece on a low to medium heat.
- 4. Add cooking oil (max. 2 cm / 1") and let it run all over the inner surface (peanut or grape oil is recommended).
- 5. Continue heating till it is steaming keeping watch to ensure the oil doesn't burn.
- 6. Remove from the heat and allow to cool.
- 7. Pour the oil out and wipe off any excess oil with absorbent kitchen paper.

Once the Piece has Been Seasoned

It is not necessary for it to be scrubbed or washed in hot soapy water; this may breakdown the seasoning or 'patina' (a brownish film) developed. Generally, if it is washed/scrubbed under hot running water while still warm, any residues will be removed and harsher treatment is not needed. For stubborn stains heat up baking soda and water. Should the piece need to be cleaned in hot soapy water it is recommended that the piece be seasoned again.





Manufacturing of Cast Iron Le Creuset Products

An Authentic Savoir-Faire Since 1925

Since 1925, Le Creuset has designed and manufactured its enamelled cast iron cookware at their foundry in Fresnoy-le-Crand, Northern France. All Le Creuset products benefit at each manufacturing stage, from the "savoir-faire" and rigorous standards handed over by generations of craftsmen.

Each Le Creuset Piece is Unique

When you acquire a Le Creuset cast iron kitchen utensil, you become the owner of a unique item. The sand mould used to make the shape is used only once and destroyed after each use. The sand is then recycled to produce new moulds.

Composition:

10 % cast iron (pig) - 35 % steel - 55 % recycled iron

moulding of the cast iron



melting, casting and quenching



knock-out



To create the desired shape, 2 sand moulds are made by blasting and compressing sand on a cast iron called "template". The first mould produces the inner shape of the product, the second its outer shape. These two moulds are put together, leaving a gap of 3 mm in order to receive the molten cast iron

All the raw materials are melted at 1500°C in an electric furnace controlled by computer in order to monitor the quality of the cast iron produced. Checking the temperature and the purity of the cast iron is essential for the success of a piece no more than 3 mm thick.

Molten iron is spread into the sand mould electrically. Then cooled with water.

When the cast iron has cooled, the piece is removed from the mould. Sand mould is brocken. Each sand mould is used only once making each Le Creuset piece unique.

Each piece of Le Creuset cast iron passes through more than 30 pairs of craftsmen's hands.

shot blasting (stage 1) and fettling



Each piece is checked manually to detect major faults. Then it is subjected to metal shot blasting to remove any sand which may be left behind.

Then each piece is fettled, that is to say "ground" by hand by specialists to get rid of any roughness.

shot blasting (stage 2) and quality control check



Each piece is again shot blasted by blasting metal balls in order to obtain a surface which is both smooth and slightly rough so that the enamel can adhere properly.

Finally, a last manual check is carried out before enamelling to eliminate pieces which do not correspond to the quality standards of Le Creuset.

ground coat enamelling, drying and baking



An initial layer of grey enamel is applied: "the ground coat", in order to provide protection against rust and detergents, and to optimise the grip of the second layer. Pieces are 100 % enamelled: inside and outside.

The piece is dried at 150°C ("biscuit") for 10 min before being fired in an oven at 840°C for 80 min.

coloured enamelling and drying

Then the second layer of enamel (black or a colour) is sprayed ...

... dried at 130°C for 40 min ...

baking andquality control of pieces



... and fired at 790°C for 80 min. This layer is highly resistant to acids and detergents, and ensures a durable and hard wearing finish.

The piece is again subjected to several manual checks by qualified personnel before being packed.

Quelle: www.lecreusetexport.com/manufacturing.php





When you purchase a piece of Le Creuset cookware you are purchasing a one of a kind. Each piece, because of the way it is hand crafted, is truly unique.

The following information is provided to ensure that you get the best results from your Le Creuset piece for many years to come.

Pre-Heating

Le Creuset cookware is extremely energy efficient, and best results are obtained on a low to medium heat. Food sticking is nearly always because the correct heat is not being used. The pan has been pre-heated too long or on too high setting. Cast iron needs to be pre-heated slowly. If you heat it too quickly on too high heat, the cast iron expands faster than the enamel - which can result in the enamel chipping. Depending upon the size of each item it should be preheated on a low to medium setting for approximately 3-4 minutes without a lid and with no oils. If the item is pre-heated with the lid on - it causes a build up of heat too quickly and the enamel may chip.

Heat Source

Le Creuset cast iron is suitable for all heat sources including induction hobs. Select the size of your heat source so that it is as close as possible to the base size of your pan. This will prevent energy loss and overheating of the handle. Placing a small pan on a large burner will result in the side walls becoming over-heated and the handles becoming damaged or too hot to handle.

Low to medium heat settings will provide the best result for a majority of cooking applications, including frying and searing. High heats should only be used to either boil water for vegetables or pasta or for reducing the consistency of stocks and sauces.

Handles and Knobs

The black phenolic handles/knobs on Le Creuset cookware are oven and grill safe up to 200°C / 380°C. Some handles on Le Creuset saucepans and frypans are made from solid teak or beechwood. These are oven safe up to 100°C / 212°F. Cast Iron handles and stainless steel knobs can be used at any oven temperature and under the broiler. Metal handles will become hot during stovetop as well as oven use. Use a dry, thick cloth, oven mitt or a Silicone Cool Tool for handlich these at all times.

Weight

It absorbs and distributes heat more evently, preventing "hot spots" and thus ensuring the best flavour is brought out from the ingredients.

It ensures moisture and flavours are sealed in by well fitting lids.

It keeps its shape and maintains a flat, steady base for a lifetime.

It retains heat longer which keeps foods hot when serving.

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Preferred Oils to Use

- 1. On the matt black surfaces, it is recommended to use peanut oil or grape seed oil. These oils are less volatile (they have a stable holding temperature of 220°C) and will not cause food to stick. Use olive oil only for added flavour at the end of the cooking process. Remember during pre-heating no oils at all should be used. NB: The secret is in using very little oil!
- 2. With the sand coloured enamel products such as the French Ovens, use butter, or olive oil

Utensils to be used

Metal spoons and cooking utensils may scratch or damage the sand coloured enamel. To maintain the life of Le Creuset pieces wooden or nylon utensils should be used at all times.

Marinating in Le Creuset

All Le Creuset products are coated with the highest quality vitreous enamel. This hygienic, impermeable enameled surface means Le Creuset can be used for marinating food prior to cooking or for food storage after cooking.

Cleaning and Storage

The enamel surface is a fantastic material as it cleans very easily. Once you have removed the food from your piece (while it is still warm) fill with hot water and a squeeze of detergent. This makes it very easy to wash later. For stubborn marks or food residue a nylon scourer with Le Creuset Pots and Pans Cleaner can be used. We do not recommend powder cleansers or metal scourers, as these can be harsh and scratch the surface.

Generally, rusting on the rim of Le Creuset pieces is caused by the piece either being washed in a dishwasher or not being dried properly after cleaning. To remove, use a liquid washing detergent and a nylon scourer to rub the rust away. When clean, wipe dry and apply oil to rim. Always hand dry rims and lids thoroughly with a hand towel.

Le Creuset Cast Iron products are dishwascher safe but we do not recommend to put Le Creuset in the dishwasher or to leave Le Creuset pieces to drain/drip dry. Please always wash by hand and dry thoroughly by hand.

Warranty

All Le Creuset pieces are covered by a 30 year guarantee against manufacture faults and defects.