# SELLACOHOLLAND

DYI Basics of candle making



# www.sellacq-holland.nl

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### SELL ACQ Holland

# **CANDLE MAKING INFORMATION**

### **Basic candle making information**

Making candles seems quite simple, and luckily it's not very difficult in practice either. It is a matter of the right materials and the right tools.

Nevertheless, there are quite a few things that can influence the result of homemade candles. To familiarize you with the versatile world of candle making, we are happy to share our possibilities and knowledge.

### **Inspirational ideas**

We do not only provide information about our raw materials and materials. We also want to share as many ideas as possible and explain the different ways you can work with our products. We do this by means of step-by-step instructions, with clear images.

### workshops

In addition, we organize candle making workshops in our showroom in Joure several times a year. These workshop/do days are also possible at your location. Check out our website for more information or ask us!

### **Cleaning and maintenance**

Proper cleaning can save a lot of time and inconvenience. That is why we would like to give you some examples and tips on how to optimally clean the candle factory and maintain your equipment.

### **Questions or remarks?**

Do you have any further questions or comments about products or techniques? Or do you have other questions about the processing or burning of candles? Then don't hesitate to contact us. We are happy to help you!

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# Paraffin

#### What is Paraffin?

Paraffin (also a used to be Or wax called) is a "residue" product of the fossil raw material petroleum.

Chemically speaking, it is a saturated hydrocarbon, extracted from the fossil raw material petroleum. Our paraffin is purified using modern, environmentally friendly cleaning methods and removed from all possible harmful substances. This process results in a highly refined final product that is subject to continuous quality control and is toxicologically(\*) safe from a public health point of view. The natural properties are characterized by good degradability and non-cumulative(\*\*) effects.

(\* Toxicologically: toxic. \*\* Cumulatively: accumulating/ accumulative)

### **Know-how Pure**

paraffin is used in various sectors for a wide variety of applications. There are literally hundreds of different types of paraffin with all kinds of different properties.

Due to the close cooperation with the manufacturer of our paraffin, we have a very broad knowledge, extensive experience and we always stay informed of developments at product level and sustainability.

#### Making candles from paraffin

Paraffin is an excellent base material for making candles. A few more ingredients can be added to this base. Each candle is ultimately composed with its own "recipe".

In our catalog you can find all information about the various raw materials and additives. If there are still questions or ambiguities, you can of course contact us for a further explanation.



Paraffine van SELLACQ-Holland

### Eigenschappen/toepassing

Voor alle productie methodes	•		
Voor alle kaarsen diameters	•		
Geschikt om te kleuren	•	•	•
Geschikt om te geuren	•	•	
Goede brandeigenschappen	•		•
Mileuvriendelijk	•		
Witte kleur	•		•
Transparant	•		
Goede UV stabiliteit	•		
Geurloos	•		
Lange houdbaarheid	•		•
Niet corrosie gevoelig	•	•	
Recyclebaar	•		

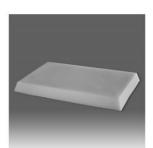
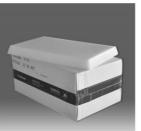


Plate of 5 kg



Box 25 kg



Pastilles, bag 20 kg



Pastilles, bag 2.5 kg

### CANDLE PRODUCTION FLOATS ON FAT

More and more large candle factories manufacture their products from various animal and vegetable fats for costtechnical reasons.

This ignores the fact that these fats are extracted from the

food industry, which can apply its use in many ways to limit food scarcity in the world.

Price is at the expense of quality. Where previously no concessions were made to quality by using purely refined paraffin, alternatives are now being chosen. A choice based purely on a money issue.....



A clear overview of product stability of fat in relation to paraffin

Pure paraffin wax Both images: left just produced, right three weeks later.

If the manufacturer chooses to produce candles from paraffin, then they can choose from high-quality types with specific properties to obtain a high-quality product.

The choice to work with pure refined paraffin can therefore be clearly explained to the consumer. Valid explanations for the use of paraffin are therefore:

 Paraffin is not harmful to the environment; - Free of harmful substances; - No threat to the food industry; - Contains no animal fats; -Harmless to health; - Continuous, guaranteed quality.

## Melting paraffin...

#### ... takes

time: Paraffin is a poor conductor. The product transmits its heat very slowly and cannot be forced to melt. In practice it often happens that boilers are fitted with an external time switch.

#### Paraffin expands and shrinks

Paraffin can expand considerably during melting. When the paraffin solidifies, it shrinks again. Depending on the type of paraffin and the temperature reached, this effect can be up to 20%. Therefore, never fill the kettle with too much paraffin. When melting, it expands and can spill over the edge! Due to the occurrence of shrinkage during solidification, cast candles must be poured afterwards.

#### Ways of heating: Melting

paraffin can be done in two different ways. indirect heating direct

- heating
- •

We always recommend heating the paraffin indirectly (using "au-bain marie"). This works more accurately, faster, safer and is better for the paraffin and the equipment. If there is no possibility to heat the paraffin indirectly, the paraffin should be melted gradually.

Therefore always read the operating instructions of the equipment!

We also recommend equipment with an adjustable thermostat. Temperature is a very important aspect when making candles. To make candles, +/- 18°C is the best ambient temperature.



Direct heating Paraffin directly into the boiler



Indirect heating Paraffin in an insert pan in a kettle filled with water

### SELL ACQ Holland

### Kernels

The wick, better known as wick or wick, is literally the burning heart of the candle and therefore a very important part. There are many factors that can affect the burning properties of a candle. The right kernel is perhaps the most important of these. Our wicks are made of cotton and meet the highest quality and safety standards. Do you need advice in finding the right pit? Let us know, we will be happy to help you!

### Different types of pit

- Flat wick Braided wick, suitable for multiple applications. Most commonly used wick for pouring and dipping candles.
- Waxed wick

Waxed wick fitted with a wick foot. Ideal for tea lights or filling glasses or jars.

Outdoor wick Thick, braided wick for outdoor candles and torches. Due to its size and special treatment, it also burns well outdoors.



#### Choosing the right wick There

is no fixed recipe for the right wick. We do offer various guidelines that can help you choose the correct kernel. The following factors influence the burning of the candle and are therefore decisive for the choice of wick:

- Composition of the candle;
- Diameter of the candle;
- Shape of the candle;
- Additions of colour(s);
- Additions of fragrance(s).

When you are going to produce a large series of candles, we always recommend testing beforehand whether the correct wick is used.

For a complete overview of our range of wicks, of course with associated applications, we would like to refer to our catalogue.

Do you still have questions? Let us know, we are happy to help you!



The burn mirror depends on the thickness of the wick. from



The size of the flame is also determined by the wick.

# Selecting the right wick

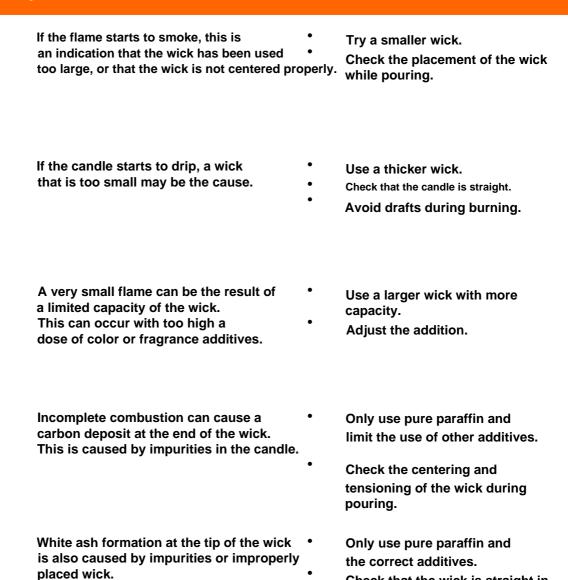


Raw materials, additives, colors & scents, diameter, shape, free-standing candle or in a glass/jar/can: all kinds of factors that influence the burning of a candle.

Solution

The table below provides an overview of common complaints with a possible explanation and solution.

### **Result Description**



Are you still running into problems? Then contact your supplier. We are happy to assist you and help you find the right solution!

Check that the wick is straight in

the mold before pouring.

### Fragrance & Color

Additions such as colorant and/or fragrance oil can strongly influence the burning properties of the candle. It is therefore necessary to choose the right wick and to test it thoroughly. Some fragrance/color combinations require additional measures. Please inquire about the possibilities!

Perfume processing guideline:

Depending on the desired result, add 15 – 30 ml of fragrance oil to 1 kg of (casting) wax. Then stir the mass well. Because the scent evaporates, we recommend adding the scent to the wax as late as possible and to pack the candle well after production.

Note: Fragrance oils can affect molds.

### **Color candles**

Candles can be colored by 'dipping' or by 'dying them through'. Our colors can be used for both techniques.

The color dosage depends on the desired result. If you want a light shade, use less color pigment. For a more intense color, the dosage can be increased. Do not exceed the maximum dose. This has direct adverse consequences for the burning of the candle.

The color pigments/tablets can be added directly to the mass to be colored and stirred with an electric stirrer (mixer) or stirrer.



#### Color pigment dosage guideline

Immerse at 80 °C

dip once = approx. 1.5% (15 grams / 15 tablets per kg wash). dipping twice = approx. 1.0% (10 grams / 10 tablets per kg wash). You can increase or decrease the amount to achieve the desired effect. Dark colors may require a higher concentration.

Through-and-through colors

Add approx. 0.1% - 0.2% p/kg (1 — 2 grams / 1 — 2 tablets per kg of laundry). You can increase or decrease the amount to get the desired color. Dark colors may require a higher concentration.

#### Color pigment processing guideline

- 1. Weigh the required amount of color pigment or count the number of color tablets to be processed.
- 2. Dissolve the pigment in a separate mixing cup at a ratio of 1 : 10 at a temperature of approx. 90 ÿC.
- 3. Mix this whole with an electric mixer until a homogeneous mass.
- 4. Pour this concentrate into the rest of the wax and mix again to a homogeneous mass.
- 5. Check whether the correct color has been achieved before starting candle production.

### **Differences during processing**

When coloring candles, many different factors affect the end result, including:

- way of mixing;
- temperature; dosage.

Below is a clear picture of the differences.





From left to right:

Candle 1: mixed mechanically and dipped over 2 x at 70 °C Candle 2: mixed manually and dipped over 2 x at 85 °C Candle 3: mixed mechanically and dipped over twice at 85 °C Candle 4: mixed manually and dipped over 2 x at 70 °C

The final color rendering depends on the raw material. This is clearly visible in the image below. On the left, color pigment has been incorporated into candles with a high fat content. The middle image is the color rendering in 100% stearin candles and on the right the colors in pure paraffin.









The type of wax with which the color is dipped is also important. In the candles on the right, the left candle is dipped over in the casting wax, while the right candle is dipped with over-dip wash

# **Candle casting theory**

Pouring candles is a common technique in candle making. The density of a cast candle is close to 100% and for that reason, in most cases, a cast candle will burn longer than a comparable candle pressed in a factory.

Various models and sizes of molds are available. Molds are usually made of plastic (transparent polycarbonate), silicone rubber, aluminum or steel.

Aluminum and steel have different properties than plastic molds. Aluminum and steel conduct better. This certainly affects the shrinking effect. Pouring at a lower temperature produces less shrinkage than filling at a higher temperature. The steel molds give an increasingly better result over time.

In addition to these molds, paraffin can also be poured into molds made of, for example, wood, cardboard or sand.

Paraffin is lighter than water. The specific gravity of liquid paraffin (approx. 90  $^{\circ}$ C) = 0.8 g/cm<sup>3</sup>. That is to say: 800 grams is 1000 ml. The specific gravity changes with temperature.

#### Preparing a mold

The preparation of a mold can be done in different ways. It is important that the wick should be placed in the middle of the mold. We have handy tools in our range for this.

The threading pin is an ideal tool for pulling through the kernel.

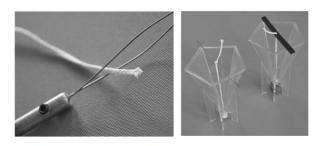
The wick is secured with the wick clamp, centering needle, sealing caps and/or sealing clay.

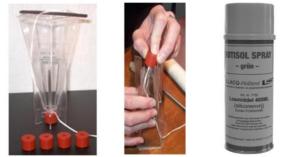
To make it easier to release the candle from the mold, it can be pre-treated with release agent spray.

A waxed wick can be used when filling glasses and jars. These wicks are fitted with a metal wick foot and can be fixed with a drop of paraffin or paraffin glue and a wick clamp or threading needle.

### Post-casting

During solidification, a shrinkage hole is created in the candle. The size of the shrinkage hole depends on the temperature, the volume and the shape of the mould. To prevent problems during burning, it is necessary to pour afterwards. Prick the crimp hole with a lancing device or needle and then pour in casting wax up to the edge of the candle. Repeat if necessary. Do not wait too long after pouring, as the casting wax will no longer adhere to the candle.







#### Tips for unloading

After the candle has hardened, it can be released. If the candle has shrunk enough, this is quite easy. In practice, there are often factors that make unloading more difficult. There are a number of tips to simplify unloading:

- Use release agent spray
- Do not fill the mold all the way to the brim
- Have a clean mold
- Add more stearin
- Casting at a higher temperature
- Place candle + mold in refrigerator

#### Influence of temperature

If you want to make a tight, shiny candle, the temperature of the paraffin must be high. It is also advisable to preheat the mold to be used for making a glossy candle. The type of casting wax also has an influence.

Prefer a rustic candle? Pour at the lowest possible temperature and do not heat the mold before use.



### **Process shiny candle**

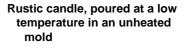
Heat the casting wax to a temperature between 85 and 90 °C. For a sleek and shiny result, use the casting/ dipping wax glossy type 0716 (art. 1015). Prepare the mold and preheat it to approximately 75 to 80 °C in, for example, the mold cleaner (art. 9106 or art. 9106.01).

### Method rustic candle

Heat the casting wax to a temperature between 60 and 70 °C. The lower the temperature, the more rustic the final result. Prepare the mold. Do not preheat the mold this time. As soon as the casting wax is liquid, the candle can be poured.

Advice: measure the temperature of the casting wax well before casting to check at what temperature the desired result is achieved.

Smooth candle, poured at a high temperature in a preheated mould







# **Pour candles**

Requirements Art. : 1012 Casting wax/casting mix Art. 1041 Stearin Pit Mold + accessories

#### Description

Candles can be cast in all kinds of moulds. Important aspects are composition and temperature of the wax.

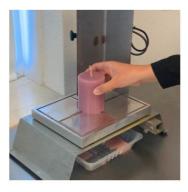
- Melt the casting wax (paraffin) and add approx. 10% stearin. If our casting mix (art. 1042) is used, stearin no longer needs to be added. Pouring at a low temperature (65 °C) gives the candle a rough look, pouring at a high temperature (90 °C) gives a smooth result.
- 2. Prepare the mold with the correct wick. See the table in the catalog for this. Get a clean mold and heat it for best results. If necessary, use release agent (art. 7152) to spray into the mold. This makes it easier for the candle to release from the mold.
- 3. Stir the casting wax and stearin well.
- 4. Slowly pour the casting wax into the mold. If necessary, gently tap the mold to remove air bubbles. Pour the mold up to about 10 mm below the edge, this makes it easier for the candle to dissolve.
- 5. The wax now needs some time to solidify. Paraffin and stearin shrink during solidification.
- This creates a shrinkage hole in the candle.
- 6. Poke some holes along the wick of the candle and refill. Repeat this process several times. With large candles (larger volume) there is more shrinkage than with smaller candles.
- 7. If the candle is difficult to release from the mould, place it briefly in the fridge/freezer. Due to the low temperature the paraffin/stearin will shrink.















Scan the QR code for the instructional video!

# **Dip candles**

Requirements: Art. 1010 Dip wash Art. 2036 Pit 3x6 Art. 8411 Immersion heater (optional) Description: Dipping candles is a patient job. It is important to prevent drafts, which can cause wrinkles in the candle.

- 1. Melt the dip wax to 68 73 °C. If the wax is too hot, the wax will solidify too slowly and will not adhere to the wick.
- 2. Prepare the plunger with the desired wick. For standard dinner candles, this is the 3x6. Dipping is possible with a separate wick, but to increase production the use of a dipping device (art. 8411) is recommended. This keeps the wick under tension and makes it possible to dip several candles at the same time. The immersion heater can be easily prepared using a wick tensioner (art. 8314). Make sure the wick is stretched straight and tight on the plunger.
- 3. Tie the wick to the bottom wheel of the plunger. Thread the wick from top to bottom (alternately) and end again at the bottom wheel. Now remove the immersion heater from the tensioner or loosen the top screw, so that the wick is tensioned.
- 4. Immerse the whole in the paraffin and allow the wick to saturate well. This takes approx. 30 seconds.
- 5. Then dip the candles evenly in a smooth motion. Wait approx. 1 minute in the meantime to allow the paraffin to solidify. Use the stand for immersion heaters (art. 8470.1) for this.
- 6. Dip until the desired thickness is reached. If necessary, use a measuring kit (art. 8505).

For a standard dinner candle (length 28 cm, diameter ø 2.3 cm) approximately 30 dips are required.

- 7. After dipping, hang the dipper partially back into the paraffin to allow the candles to reach the desired temperature length or use a melting tank (art. 8725).
- 8. To color dinner candles, they can be dipped in colored paraffin. When the candles are still warm, they can be shaped as desired.

















Scan the QR code for the tutorial video!



Scan the QR code for the instruction video on the following techniques:

- Pour two colors together;
- making kibble candles;
- making wire candles;
- tamponing candles;
- Making brush candles.



### Pour two colors together

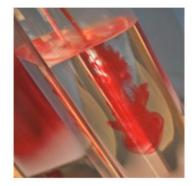
Supplies: Cast wax Color pigment Molds **Description:** 

Casting candles with two colors gives a special effect. Naturally, all (contrasting) color combinations are possible. Keep experimenting by pouring later or earlier with the contrasting color or try a third color!

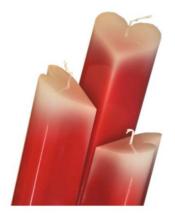
- 1. Prepare the molds with proper wick. Fill the molds to the desired height with the first color.
- 2. Allow the casting wax to solidify for a few minutes until a clearly visible haze is formed. Once it is visible, the other color of paraffin can be poured. Do this as slowly as possible to increase the effect. There is no exact moment when the second color can be poured. This depends on the temperature of the wax and the dimensions of the mold. The result may differ each time.
- 3. Keep pouring the rest of the colored casting wax into the mold and let the casting wax solidify. Keep pouring regularly to limit the shrinkage hole.











# Making chunky candles

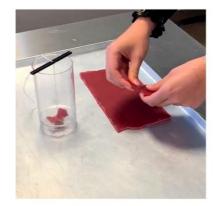
Requirements Art. : 8472 Pouring plate Art. 8477 Baking paper Colored casting wax Clear casting wax Prepared casting mould

#### **Description:**

Making chunk candles is a simple activity with a beautiful result. The chunk candle can be manufactured in many variants and color schemes and the result is always unpredictable. Feel free to experiment with color and counter-color!

- 1. Prepare the pouring plate: line it with baking paper to make it easier to release.
- 2. Pour colored casting wax in a layer of approx. 2 4 mm thick (depending on the desired result) on the casting plate. Let the plate harden.
- 3. Break the cured sheet into chunks of various sizes.
- 4. Fill the prepared casting mold with these chunks and then fill the mold with clear casting wax.
- 5. The clear casting wax starts to solidify immediately and when it has hardened completely, the chunky candle is ready.









### **SELL ACQ Holland**

### Making wire candles

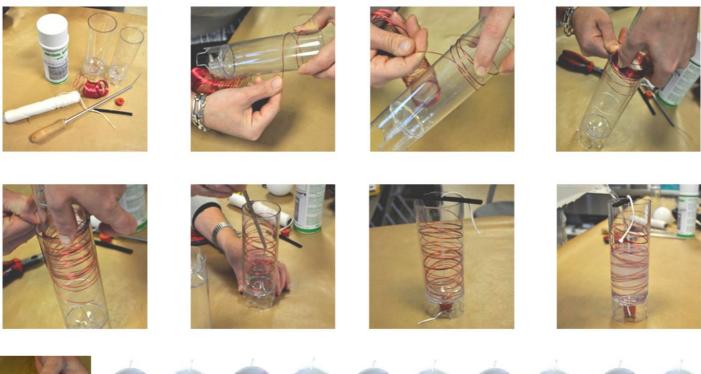
#### Supplies:

Art. 6145 Mold block candle (in various sizes) Art. 5830 to 5842 Colored winding wire (various colours) Art. 2603 Threading pin 35 cm Art. 7152 Release agent spray Casting wax Pit (depending on the chosen mold) Description: Wire candles are fun to make and give a unique effect when the candle burns.



- 1. Take a large and a slightly smaller mold from the bell candle series. Wrap the colored wire around the small mold. Determine how much wire is used in the candle. If holding the wire in place is difficult, a piece of tape can also be used.
- 2. After winding the wire, slide the small mold into the large mold and make sure that the wire is slid into the large mold.
- 3. Slide the wrapper off the small mold into the large mold. The threading pin is a handy tool for placing the winding wire in the right place.
- 4. Then prepare the casting mold with the correct wick and fill it with casting wax. For an extra effect, use our transparent wax, which makes the colored thread even more beautiful!

ATTENTION: The colored winding wire is made of thin iron wire with a coated layer and does not, flammable. Care however, preventatione flame flame for an considered science with the information with the candle is burns. To do this, bend the wire away from the lot of orch else the sides of the candle. at





TIP: wrap the colored thread around a punctured tennis ball for a convex shape!

## **Tamponing candles**

#### Requirements Art. 8706.03 Padding system Art. 8484 Damp brush Candle Colored (casting) wax

**Description:** 

Candles provided with a colored layer by means of a tampon technique. The tamponing technique gives a rough look and the candle gets a tough and natural look. The work is safe and easy to perform.

- 1. Fill the jars of the Tamponeer Bain Marie system with colored paraffin and keep the temperature of the molten paraffin at approx. 65 70 °C.
- 2. Dip the brush in the desired color and dab/smooth the brush onto the candle. This provides the candle with a thin layer of colored paraffin.

The application of the colored wax can be done thick or thin, depending on the desired result. Each candle can be decorated with this and the color options and/or combinations are unlimited!













### **SELL ACQ Holland**

### Making brush candles

Requirements: Art. 7076 Wire brush Art. 7077 Painter's tape A selfmade candle Any additional

requirements: Decorating wax sheets (art. 5101.01 to 5127.01) Candle paint (art. 5290 to 5299) Damp brush (art. 8484) Set of brushes 3 pieces (art. 7614) Description:

Give candles a robust look by brushing the candles roughly with a wire brush. The technique is simple and gives an exclusive look!



Brushing a candle with a steel brush is a simple technique that makes it possible to give an ordinary candle a special look. It gives the candle a very matte, beautiful and robust appearance. In addition, everyone sometimes happens that a candle does not come out of the mold as desired. This technique also comes in very handy for such a candle!

Another option: Partly

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- 1. cover the candle with painter's tape.
- 2. Then brush with the wire brush over the surface of the candle according to the result.
- 3. To accentuate the difference even more, you can choose to finish the candle with decorative wax, candle paint or the tampon technique. It is also possible to further process the candle with a heated gouge.





### Making pouring torches

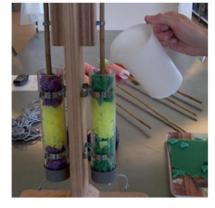
#### Requirements: Art. 7104.01 Torch stand Art. 7126 Torch sticks 900x10/12 mm Art. 2323 Outer wick 3 mm Art. 7152 Release agent spray Casting wax Chunks of colored paraffin (optional)

#### **Description:**

Torches in fresh colours, with chunks or colored through and through. Easy to pour using our torch stand, complete with two clear fill tubes and sealing caps! Suitable for making two torches at the same time.

- 1. Thread a 3mm piece of outer wick through the sealing cap and the filler tube. Then put the cap on the tube.
- 2. Spray the tube with release agent spray to make it easier to release the torch.
- 3. Take a sturdy torch stick (Ø 10 12 mm) and attach the wick to the stick with painter's tape.
- 4. Place the tube between the two clamps of the casting stand and adjust the stick to the correct position in the top clamps of the stand. Make sure that the glued piece of wick with stick protrudes approx. 6 8 cm into the tube when the stick is clamped.
- 5. Pull the wick tight through the cap and seal the wick hole with painter's tape so that it stays in place and seals the wick hole properly.
- 6. Repeat this process for the second tube. The casting stand is ready for use.
- 7. Fill the tubes with chunks of colored paraffin and then top up with liquid (colorless) paraffin. Of course, the tube can also only be filled with colored liquid paraffin.
- 8. Let the torches solidify.











### **SELL ACQ Holland**

# Making super wind lights

Requirements Art. : 6368.3 Large mold Art. 8421.01 Collection tray Art . 5332 Knife Colored (cast) wax Painter's tape Gloves

#### **Description:**

Lanterns in various sizes. Fill the bottom of the lantern with a little sand, shells or stones and place a candle or tea light in it. While burning, the candle will shine through the lantern.

This method can be used for several molds!

- 1. Take a large mold and tape it to the sealing edge with painter's tape.
- 2. Place the taped mold in a large container and then pour about half a liter (coloured) paraffin of about 65 70 °C into the mold.
- 3. Take the mold in your hand (gloves!) and let the liquid paraffin run all around the inside of the mould. Because the paraffin solidifies, a thin layer of paraffin will adhere to the inside of the mold.
- 4. Repeat this procedure at intervals (to solidify the paraffin) until an even thickness of approx. 8 10 mm is reached.
- 5. Cut off the excess solidified paraffin with a knife and finish the edge neatly.
- 6. Wait until it has completely cooled down and the paraffin has completely solidified. Remove the painter's tape and carefully take apart the divisible mold so that the lantern candle is released.







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# Making lanterns with inlays

Requirements: Art.1070 Colored kneading-cutting wax Art. 8472 Pouring plate Art. 8477 Baking paper Art. 6160 or 6161 Prepared casting mold Casting wax Description: A variation on the lanterns: striking colors and figures in the lanterns. While burning, the candle will shine through the lantern.

- 1. Line the pouring plate with baking paper to make it easier to release.
- 2. Pour colored cutting wax (type 5405) in a layer of approx. 2 4 mm thick (depending on the desired result).
- 3. Dissolve the paraffin plate once it has solidified.
- 4. Place the plate in a container of warm water to make the wax malleable. Dry the laundry and cut out the desired shapes. The kneading-cutting wax is easy to shape. If the wax has become too hard, it can be reheated in warm water.
- 5. Make sure the paraffin is completely dry. Then place the cut-out shapes randomly in the mold.
- 6. Let the casting wax with a temperature of between 65 70 °C move slowly through the casting mould. Cover the cookie cutters with enough paraffin. This is a patient job and takes some time.
- 7. Once the wax has hardened, the lantern can be released. If white paraffin has run in front of the colored shapes, this can be removed with a (heated) snap-off knife.



















### Making silicone molds

Requirements: Art. 7402 Set silicone rubber Art. 7155 Measuring cup Art. 8301 Stirrer Mother model Support jig **Description:** 

Making your own silicone rubber molds is a practical and easy way to create a unique product yourself. Silicone molds are very durable and are easy to work with due to their flexibility. How its processing works is described step by step below!

To make a silicone mold, you first need a "mother mold". The master mold eventually becomes the thickness of the mold and is therefore very important for the final result. Make sure that the silicone mold is at least 1 cm thick on all sides. The mold then has sufficient strength to last a long time. Silicone rubber gives an exact copy of the parent model and shows every detail.

- 1. Take a measuring cup/jug and a good stirrer. Mix the silicone rubber with the hardener in a ratio of about 1 to 10. Mix gently and evenly to avoid air bubbles.
- 2. When a homogeneous mass has formed, you can gently pour the mixture over the master model in the casting support model.
- 3. The silicone rubber can be processed a few minutes after mixing and then starts to harden. For best results, allow the rubber to cure for at least 24 hours.
- 4. Then remove the silicone mold from the support mold and remove the master model. The mold is now ready to use!

For the advanced user; it is also possible to make divisible silicone molds for slightly more complex shapes.

Add less hardener to the rubber for a more flexible mold. Use more hardener for a stiffer, firmer mold.











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The silicone rubber is supplied as a set of 1 kg including hardener. The tin also comes with instructions for use.

# Making silicone molds using spatulas

Requirements: Art. 7410 Set Silicone rubber Art. 7410.1 Thixio Art. 8311 Stirring bar Art. 5332 Snapoff blade

Description: In addition to casting a silicone mold, spatula is a good technique for making silicone molds. Mold spatula is mainly used in the creation of a large mold.

- <sup>1.</sup> To make a silicone mold by means of spatulas, the silicone rubber, the hardener and the Thixo are needed. Add the hardener to the silicone rubber according to the ratio 2 to 100 (is 2%).
- 2. Then add 0.5 -1% Thixo to this whole. Stir the components well, until 1 homogeneous mass is obtained. When many air bubbles form, let the mass rest for a while (+/- 5 minutes).
- 3. You can then apply the mixture to the master mold with a spatula. Make sure the layer is about 1 cm around the mother mold.
- 4. Allow the mass to harden for approx. 24 hours at room temperature, approx. 18 °C. Then carefully cut open the mold with a sharp knife (art. 5332).















The silicone rubber is supplied as a set of 5 kg including hardener. The can including the hardener is provided with additional instructions for use and is available under art. 7410.

### **SELL ACQ Holland**

# Making tea light holder from paraffin wax

Requirements: Art. 7191 Drip tray Art. 6720.01 Silicone insert Art. 6720.02 Silicone protection plate Art. 6720 to 6724 Template for tea light holder (available in different shapes and sizes) (Colored) paraffin

Description:

Making your own paraffin tea light holder is very easy! Vary with the various shapes and sizes of molds from our range.

- 1. Place the chosen mold for the tealight holder on the drip tray and place one or more silicone inserts in the middle of the mold.
- 2. Fill the molds to the desired height with the liquid paraffin of about 65 70 °C (if the temperature is too high, there is a chance that the paraffin will leak from the bottom of the mold, so use a drip tray!).

3. When the paraffin has solidified, it can be released from the mold for the tea light holder.

- 4. Remove the silicone insert. Place the silicone protection plate that protects the holder against the heat of the tea light.
- 5. Place the tea light on the protective plate.

TIP: Place 'tealight sleeve around waist' (art. 6708) on the tealight protection plate and fill it with our scented and colored Waxprills (art. 1621–1628)!











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# **Making drip candles**

Requirements: Art. 2034 Pit 3x4 Art. 1010 Dip wash Art. 3302 to 3956 Color pigment Art. 8411 Immersion heater (optional) **Description:** 

Any candle may drip. Dripping is a reaction that follows when a candle does not burn properly. The dripping of a candle can be very annoying, but in some cases it can also give a very nice effect! Below we explain how a candle can be made to drip consciously.

- <sup>1.</sup> Dip the candle with dipping wax. Use a smaller wick than normal.
- 2. While dipping, work the candle by pushing in the surface and irregularly smoothing the candle to make. Due to these factors, the wick has more difficulty burning the candle, causing it to overflow (drip).
- 3. Dip the candle to finish it in the desired color.
- 4. Some tips to promote dripping:
  - ÿ Place the candle slightly askew in the holder or, for example, an empty wine bottle. For example, use a candle sharpener (art. 7106).
  - ÿ Place the candle in a draft. Due to a drawing air flow, the flame will wake up, causing the candle to drip extra.

TIP: Dip different colors on top of each other for a unique effect with different dripping colors from one candle!

















### **SELL ACQ Holland**

### Making wax melts

Requirements: Color pigment of your choice Paraffin (any type can be used!)

Mold of your choice

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Description: It's very easy to make your own wax melts! Our paraffin is an excellent carrier for fragrances and can be poured into all kinds of fun shapes. For example, use the molds for the floating candles, the decor molds or use kneading/cutting wax to cut out nice shapes yourself.

- 1. Melt the paraffin (any type can be used) and add the desired color. The dosage depends on the desired result, but for the Waxmelts the following advice applies: approx. 5 10 grams of color per kilogram of paraffin.
- 2. Add the fragrance at the last minute and stir well. This also applies here dosage depends on the desired result. A guideline is: 15 30 ml of fragrance per kilo of paraffin.
- 3. Pour the paraffin into the chosen mold and let it solidify.





# Make fairy candles

Requirements: Art. 8415G Dipping pen stainless steel 20 cm Art. 6134 Casting mold 'Sun large' Art. 7075 Prick for pourable candles Art. 2506 TL wax wick 8 — 10 cm Casting wax **Description:** 

With this special technique you can make eye-catching candles in a simple way. Feel free to vary the molds to create various fairytale candles!

- 1. Pour the casting mold 'Sun' with the casting wax and let it solidify.
- 2. Remove the 'Sun' from the mold and drill a small hole in the center of the 'Sun'. This can be done, for example, with a heated needle/lancing device (art. 7075).
- 3. Pass the dipping pin through the 'Sun' and secure it with the supplied nut. Now the candle is ready to dip.
- 4. Dip the 'Sun' in the paraffin and carefully pull it back up. It is intended that the paraffin drips off the 'Sun' to form drips.
- 5. To solidify the drippers, it is wise to keep the paraffin at a low temperature (approx. 70 75 °C). This works the easiest.
- 6. After dipping the fairy candle, it can be dipped in colored paraffin and be decorated.
- 7. When the fairy candle is ready, the dipping pin can be loosened and can go through the hole of the dipping pen a wick can be placed. Fill it with a little paraffin to secure the wick.











### **SELL ACQ Holland**

### Make wax lights

Requirements: Art. 6520 to 6528 Wax light mold (available in different shapes and sizes)

Art. 6529 Mold plate for wax light Pouring wax jug **Description:** A

decorative product, simple but fun to make because of the enormously versatile possibilities. A wax light is a nicely shaped paraffin plate that can be bent into a convex or concave shape. Placing a candle behind the wax light creates atmospheric lighting.

- Place the chosen mold for the wax light on a straight surface. Fill the molds as full as possible, this ensures a stable end result. The desired temperature with the liquid paraffin of approx. 70 80 °C.
- 2. When the paraffin has solidified, the cast plate can be released from the mold.
- 3. Then place the plate in warm to hot water for about 10 minutes. Now the plate can be formed by bending it on the molding plate.





TIP: These wax lights can be beautifully decorated with, among other things, color pigment, decorative wax plates, wax pens and/or prints on transfer paper!

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# **Transfer processing**

#### **Requirements: Art.**

5150.2 / Art. 5152 Transfer paper type Laser printer or Transfer paper type Inkjet printer Art. 5153 Ceramic eraser Bowl of water Candle with smooth surface

Description: By means of transfer paper, you can easily give a candle its own unique look.

- 1. A good base is necessary for good adhesion of the transfers. Make sure the candle you are applying the transfer to has hardened for at least 48 hours.
- 2. Cut out the image and place it in lukewarm water.
- 3. After ± 30 seconds take the image out of the water, the image can now be moved back and forth on the paper. If this is not possible yet, leave it in the water for a while.
- 4. Slide the image about one cm off the paper. Hold this section on the candle with your thumb and slide the backing paper out from under the image.
- 5. With a ceramic eraser you then iron out all the moisture from behind the image.
- 6. Let the transfer dry for at least 24 hours.
- 7. Dipping is possible to keep the transfer looking good for as long as possible. Subsequent dipping is best done with casting/ dipping wax type 0716 (art. 1015) at a high temperature (approx. 90 degrees °C).

This puts a thin layer over the candle, resulting in less/no drips and high translucency.





### **SELL ACQ Holland**

# Easy marble

Requirements: Art. 5381 to 5402 Easy marble paint (available in different colours)

Pot or bucket of water

Candle

Drip, dip and done. Turn a standard candle into a unique one in no time with the Easy marble paint.

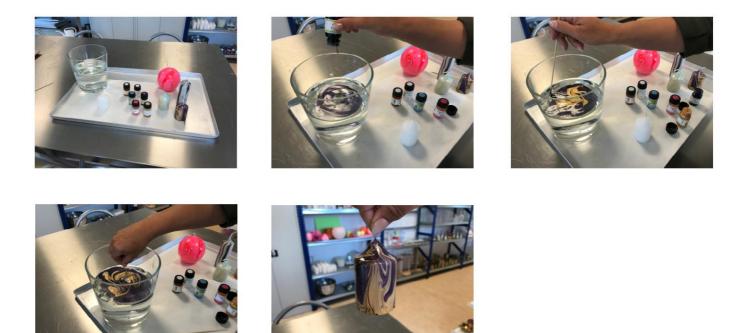
1. Preparation: Fill a pot or similar with water. It should be deep enough to fully submerge the candle.

**Description:** 

2. Shake the bottle well before use. Drop some color on the surface of the water. Add another color in the middle. Two or three colors works ideal.

3. Draw a structure through the paint on the water surface with, for example, a cocktail stick (e.g. lines from the inside out, or draw an 8 in the paint, or... let your imagination run wild!

- 4. Dip the candle in 1 movement through the paint.
- 5. After drying, the candle is ready.



TIPS:

Work smoothly from dripping to dipping. The fresher the paint, the better the result! Combining with white, gold and silver gives a special contrast. It also gives special results on colored candles! By taking a shade of the Easy Marble that is slightly darker than the candle itself, it still gets a special look.

Before starting the next candle, make sure the water surface is completely clean. Old paint residues hinder the flow of the new paint drops. The old paint can be easily removed from the surface of the water with a piece of paper.

# Worth knowing & tips

#### The burning time

To determine the burning time of a candle, the following 'rule' applies: A candle made according to the correct proportions and burning under the right conditions consumes 7 - 10 grams of paraffin per hour. If the weight of a candle is known, the burning time (approximate) can therefore be determined very easily.

Some tips for the optimal use of candles

- ÿ Do not place candles near radiators, fireplace, stove, TV or any other heat source.
- ÿ Do not place candles near curtains, opening doors, or in places that are walked by a lot.
- ÿ Avoid drafts and fans should be turned off.
- ÿ Place candles at least 10 cm apart.
- ÿ Before lighting the candle (again), cut or squeeze the wick to within a few millimeters.
- y Instead of blowing out the candle, it is better to extinguish the flame by immersing it in its own fat. Don't forget to put the wick upright again afterwards.
- y Thick or large candles should burn for a long time. This is to prevent the candle from only burning inside.
- ÿ Do not light a candle with dust on it. Remove dust with a damp cloth, do not rub.
- ÿ Never leave a burning candle unattended. Be careful with children and pets.
- ÿ Never use candles and/or pots for outdoor use indoors.

#### Smoking candle?

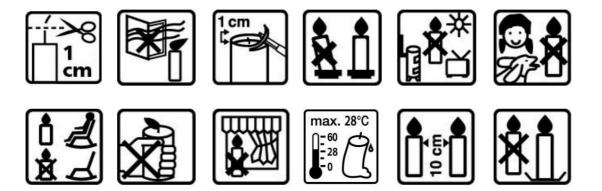
If the candle starts to smoke, the wick is usually too long. Then cut the pit again to within a few millimeters. Have candles placed flat. Candles placed at an angle cause a problem. A lack of oxygen for the flame can occur because a candle edge remains. Trim this edge.

Dripping candle?

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- ÿ Candles placed in a room that is too warm.
- ÿ Candle burns in one direction due to draft. Rotate the candle for a balanced burn.
- ÿ Angled candles.
- Stearin has a property that makes candles drip less (or not). Therefore, add approx. 15% stearin when making large abbey candles or large bell candles. This results in whiter and firmer (harder) candles (less warp).

> Make your customers aware of these general guidelines. By following these guidelines, candles can burn properly.



### **Frequently Asked Questions**

The overview below shows the most frequently asked questions regarding problems in the manufacture of candles.

Issue	Possible cause	Possible solution
Air bubbles	- Cooled too fast.	- Cooling less quickly.
	- Poured too cold.	- Pour at a higher temperature.
	- Poured too fast.	- Pour slower and more carefully.
	- Air has not escaped.	- Tap the air out against the mold during pouring.
Candle does not want to	- Mold not greased.	- Spray mold with silicone spray or olive oil.
release from shape	- Pouring temperature too high	- Check the maximum temperature for this mold.
	<ul> <li>Check over maximum.</li> </ul>	- Do not exceed the recommended maximum amount.
		- Put the cast mold in the freezer for a while and it will usually loosen.
- Dents in candle	Shrinkage is a natural	Paraffin expands with heat and shrinks with solidification. This is
- Sides pulled in	process during cooling.	normal and unavoidable.
Onimus Isala in		Heat the mold before pouring. The higher the molding temperature, the
- Crimp hole in the candle		more shrinkage occurs. Prick around the pit with a pen and fill these holes
		during the coagulation process. Repeat this a few times. Make sure there are no major temperature differences during the post-moulding. Avoid pouring
		after complete solidification.
Cracks in the candle. Coo	led too quickly.	Let the solidification process take place at room temperature.
		Cooling in the freezing cold causes cracks.
Post-cast does not	Poured too cold.	Pour candles when they are still warm and have not completely
bond with previously cast		solidified.
used to be.		
White icing spots	- Added too much stearin.	- Add less stearin.
on the candle.		- Heat the mold before filling.
	- Mold too cold.	- Filling with a higher temperature.
	Filled too cold.	
White snowflakes Too m		- Use a better quality wax.
	- Cooled too fast.	- Addition of Vybar reduces the formation of snowflakes.
	- Too much silicone spray	- Cool less quickly.
	or olive oil used.	- Use less spray or oil.
Pockmarked surface.	- Too much release	Remove too much silicone spray or olive oil and make sure that a film
	agent used.	layer remains.
	- Filled too hot.	
Candle smokes	- Pit too big.	- Use a smaller wick.
during burning.	- Air holes in the candle.	- Provide a higher pouring temperature and pierce extra holes and refill.
	- Pit too long.	- Trim the wick.
	- High oil content wax.	- Use quality wax.
Flame too high.	Pit too big.	Try a smaller wick.
Flame too small	Pit too small.	Try a larger wick.
Burning mirror of candle	- Wax has too high a	- Use wax with a lower melting point.
is too small and runs	melting point.	- Use a thicker wick.
about.	- Pit is too small.	
Flame splashes.	- Wick absorbs water	- Make sure that the wick does not come into contact with water.
	during immersion in water	- Prevent water from getting into the wash. Be careful with the
	cooling bath.	bain marie systems.
	- Water in the wash.	
Candle drips.	- Too hot environment.	- Always place candles with a distance of 10 cm.
	- March.	- Avoid draughts.
	- Candle is placed at an angle.	- Place candle straight.
	- Too thin wick used.	- Use a thicker wick.

# **Maintenance equipment**

Something can go wrong during the making of candles. Cleaning equipment or workplace contaminated with paraffin can be a tedious task. However, it is an important job. It is pleasant to work in a clean workplace and clean and tidy work is reflected in the quality of the product.

Fortunately, with the right knowledge and the right resources, cleaning and keeping the candle factory clean is a piece of cake.

### **Preventive Periodic Maintenance (PPO) Service**

Proper maintenance extends the life of your equipment. In addition to regular cleaning, the technical side is also important. The legal standards and any requirements of the insurance company also come into play. You can have SELLACQ-Holland take care of the technical maintenance.

Our experienced technicians visit you once a year to check all your devices using a checklist tailored to the device. This inspection is carried out in accordance with the statutory NEN3140 standard and you will receive (if necessary) tips on cleaning your equipment and working environment.



### Steam cleaner

The steam cleaner is an excellent tool for removing stubborn paraffin residues. By heating the steam and the added degreasing agent, all greasy deposits are removed.

A low-pressure steam cleaner is available from us in various versions.

Try first if this is something for you? Our own steam cleaner (with optional water vacuum cleaner) is also available for rent! Ask us about it.





### Descale

Water contains lime. For boilers that use au-bain-marie, it is therefore recommended to descale the equipment a few times a year. For this we have a very suitable descaling agent in our range that makes descaling a piece of cake (art. 7149.2).

Au-bain-marie equipment can also be filled with demineralized or softened water for less limescale.

Do you have questions? Feel free to contact us, we will be happy to inform you!

#### **Overview cleaning agents**

An overview of all our specific cleaning agents for the removal of paraffin residues:

Art. 9105 Floor scraper 30cm. Large, solid floor scraper for removing coarse pieces of paraffin.

Art. 9105.01 Floor scraper 10 cm. Very sharp floor cutter.

Art. 9105.02 Refill blades for floor scraper 10 cm.

Art. 9104 or 9104.01 Grease scraper plastic small. Plastic scraper, does not scratch stainless steel furniture.

Art. 8315 Hot air gun. Indispensable tool in candle making for removing paraffin residues.

#### Art. 7149.2 Descaler concentrated 1 Liter.

Very powerful descaling agent for descaling equipment.

Art. 7148 Gum turpentine 500 ml. Strong detergent. Removes paraffin stains from furniture and molds.

Art. 114250 Stainless Steel Cleaner 500 ml. Post-treatment agent for making stainless steel material shine.



TIP: Ensure a logical layout of the candle factory. Take into account easily accessible equipment and as little walking traffic as possible. In fixed places, preferably work above a drip tray. Clean up accidents immediately and schedule regular cleaning moments as part of the daily routine.



#### Mold cleaner The mold

cleaners are not only suitable for heating molds, they can also be used to clean casting cans, lids, threading pins and all kinds of other items. In short: this investment is worthwhile for every candle maker!

Art. 9106 Casting mold cleaner SP30 small model Art. 9106.01 Mold cleaner SP60 large model

Notes		
V	iew this information digitally? Scan the QR code!	