

HOMEBREWING FERMENTATION GUIDE



CLEANING\SANITIZING

The first and most important factor in homebrewing fermentation process is to clean\sanitize your equipment. In particular, it is necessary to accurately clean\sanitize the fermenter using the cleaning product contained in the kit. Set up the cleaning product following the instructions written on the bottle, then pour it in the fermenter. Clean the fermenter accurately, then screw its lid keeping the airlock attached and shake the fermenter in order to wash its inner surface. Let it rest 5 minutes and drain. Clean\sanitize the paddle in the same way.



fig. 1

WORT MAKING

Remove the plastic lid and the yeast sachet from the malt pack, then heat up the closed malt tin in hot water for 10 minutes. Use an opener to open the can and pour its content in a 5-8 litres pot, adding 2-3 litres hot water (try to pour what remains in the tin melting it with some hot water). If requested, add sugar (see the range guide) and mix the compound with the paddle until it liquefies completely.



fig. 2

STRENGTH

Obtaining the required strength depends on the sugar quantity you will pour in the wort (see the table on the left).

Malt (gr)	Sugar (gr)	Strength
1.500	1.000	3,8%
1.500	500	2,9%
1.500	0	2,0%

The values written above also refer to our brewing sugar packages. In order to calculate strength, you can use this empirical formula, which employs initial and final gravity as main data:

FILLING THE FERMENTER

Firstly, pour in the fermenter around 5 litres hot water, then pour the cooled wort and, finally, add cold water to the mixture (find the right water quantity in the range guide).

$$\frac{\text{Initial gravity} - \text{Final gravity}}{7,45} \quad \text{Example: } \frac{1042 - 1008}{7,45} = 34 : 7,45 = 4,56\% \text{ alcohol}$$

fig. 3

- 3- Cold Water
- 2- Hot Wort
- 1- Cold Water



FERMENTATION: THE STARTING POINT

Measure the initial gravity (fig.7) and check the temperature stated by the thermometer strip stuck to the fermenter. When it is around 20° C, add the dry yeast sachet by pouring its content directly on the wort surface. In this way, a slow yeast rehydration will start. After 15 minutes, stir vigorously for 30 seconds in order to oxygenate the wort.

Watch out! Over 26/28° C yeast may cause bad fermentations, while under 18° C the fermentation process will not start.

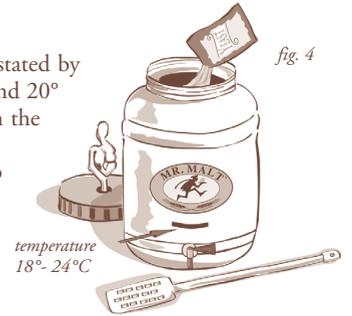


fig. 4

temperature
18°- 24°C

AIRLOCK

Close the fermenter and pour some water in the airlock up to the red line. The airlock's red cap should be delicately put on the fermenter, in order to preserve its content from the dust. Do not screw the airlock or try to hermetically close the fermenter with the airlock's cap.



fig. 5

HOW TO CLOSE THE FERMENTER

To check if the fermenter is perfectly closed, press its sides; in this way the water contained in the airlock should bubble, if water stays still, try to screw tightly the fermenter's lid or check its seals.

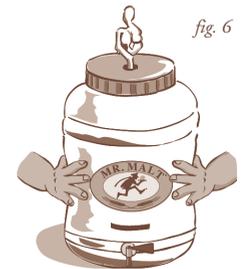


fig. 6

ACTIVE FERMENTATION

After few hours the airlock starts bubbling, marking the beginning of active fermentation. The process will be completed depending on the wort temperature: if it is maintained at 22°C, fermentation takes 5-10 days to be completed. At lower temperatures, fermentation takes more time, while at higher temperatures it ends in 3-4 days. In order to definitely check the beginning of fermentation, have a glance at the surface of the wort: if there are bubbles or foam, then fermentation has started. In this case, if you do not perceive the carbon dioxide's smell, check if lid and seals allow a hermetic closure. Use the hydrometer to check the fermentation procedure step-by-step.

FINISHED FERMENTATION

When the airlock stops bubbling, slowly unscrew the fermenter's lid and open the inferior tap in order to fill at least 2/3 of the measuring cylinder, then insert the hydrometer. You can start the bottling when the measured value coincides with the one specified in the technical guide, that is, when the final gravity remains fixed for 2-3 days. If the value is higher than the one written in the guide, close the fermenter's lid and wait a few days more in order to let the fermentation end.

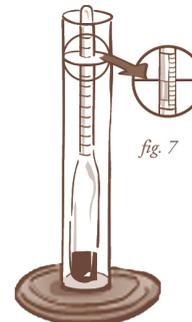


fig. 7

BEFORE BOTTLING

Wash the bottles with a half teaspoon of the cleaning product supplied within the kit melt in a ½ litre cold water. Pour the solution in the first bottle and shake it vigorously, then pour the same solution in the second bottle and keep repeating the procedure until you wash the first half of the bottles. Throw the solution and finish the bottle washing with the remaining detergent. Drain the bottles without rinsing for 10 minutes. We recommend to use the bottle sterilizer in order to make this washing stage easier and faster.

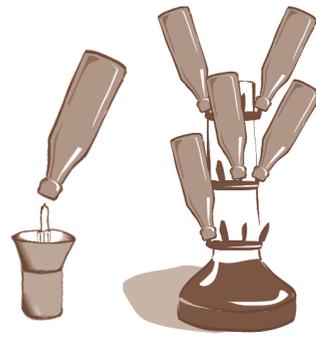


fig. 8

BOTTLING

Watch out! Don't hurry up the bottling phase. We recommend to wait a few days rather than prematurely start bottling. Use the hydrometer to verify the fermentation status.

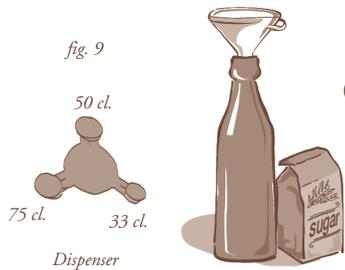


fig. 9

So as to obtain the typical long-lasting foam and carbon dioxide, pour in every bottle 5/6 gr sugar per litre. You can increase the sugar level if you desire a more sparkling beer (pay attention to how much sugar you will use because bottles may break). The sugar dispenser simplifies this procedure.

During this phase, sugar should be added independently from the malt you have used.

CAPPING

It is recommended to fill the bottles leaving 2-3 cm vacuum between the liquid and the entrance. It is very important to use good quality caps. Alternatively to the handy crown capper, we suggest to use a tabletop crown capper. Both the capping tools guarantee a right capping on every bottle type closed by crown caps.



fig. 10

MATURATION

Shake the closed bottles in order to let sugar melt. Place bottles vertically for at least 3-5 days at a temperature between 18° and 24°C (second fermentation), then put them in a cool place (cellar). After 28 days the beer is ready to be drunk: a subsequent 1-2 months maturation in the bottles will improve substantially its taste. Beer could be consumed within 24 months from the bottling date, only if bottles are stored at low temperatures.

Sediments formed at the bottom of bottles are caused by natural fermentation and are totally harmless. If you want to prevent sediments to make your beer excessively hazy, we recommend you to keep bottles vertically in the fridge for some hours, then slowly decant them in a jug.

Cheers!

It is advisable to take notes of ingredients, quantities and timing referring to your beer production. You should be able to gradually repeat the good quality batches and to learn from the bad ones. Never give up!

TEMPERATURE

Temperature is a fundamental aspect to be considered during the brewing production, especially during the fermentation process.

When you pitch the yeast, the temperature must go round 20°C, never lower than 18°C or higher than 28°C. When temperature is very high, it is necessary to immerse the fermenter in cold water. When the right temperature is restored, you can add the yeast.

During winter, in order to prevent temperature to go under 18°C, put the fermenter in a warm place (kitchen, thermal room, etc.)

YEASTS

You find a high fermentation yeast sachet supplied with the malt can. In order to be activated, yeast need a 20/22°C temperature. On demand, the low fermentation yeasts used to brew Lagers, Pilsners and Bocks are available. These yeasts are need a temperature range between 8/12°C and 12/18°C to be activated.

These yeasts allow a good fermentation also when temperature goes under 18°C (during the winter period, for example) and produce a beer with a dry and neat taste.

FERMENTATION

Fermentation begins within a few hours after the yeasts have been pitched. If fermentation has not started within 24 hours, then:

- a) open the fermenter and check the surface of the wort: if there is foam or bubbles, then fermentation has started and the only things you should do is to control lid's seals and close the fermenter.
- b) check the temperature registered by the thermometer strip: if it is lower than 18°C, it is important to increase it by placing the fermenter in a warm place or using a warming belt.
- c) sterilise the paddle, open the fermenter and stir vigorously for 30 seconds: yeasts could have been settling on the bottom of the fermenter after an oxygen shortage.

If these suggestions have not been useful, we recommend to add a rehydrated yeast sachet melt in 50 ml boiled water. When you will notice foam on the surface, you should pour yeasts in the fermenter and stir vigorously with a paddle for 30 seconds. You could employ this procedure even during the usual first stage of fermentation, when you will have the opportunity to check the yeasts vitality and to fasten their activation.

We recommend to always store a yeast sachet away. Yeast may expire if it has been stored in a warm place for a long time.

DOUBLE FERMENTATION

When the first stage of active fermentation ends, you can take into account the possibility of decanting the wort into a second fermenter (remember: do not transfer the sediments!) and wait some days for bottling. This technique produces a clearer beer, with a weak scent of yeast, particularly if wort has been decanted into minikegs. If you use bottles, the yeast's sediments at the bottom will be limited.

BOTTLE FERMENTATION

The sugar poured into the bottles will be attacked by yeasts' residuals, forming the carbon dioxide, which turns into foam at drinking time. The sugar quantity you need to pour inside bottles will be proportional to their capacity (fig. 9).

Another bottle fermentation technique is the following: provide you with a second fermenter (washed, sanitized and drained before the use), put it under the first fermenter and connect them through a sterilized rubber food tube. Decant the wort from one fermenter to the other, in order to separate the sediments formed during the fermentation. The tube must touch the bottom of the fermenter to avoid foam production and wort oxygenation. Dissolve the requested sugar quantity (5-6 g/litre) in ¼ litre steaming water and add it to the wort. Stir and start bottling.

ALTERNATIVES TO SUGAR

Together with sugar, you can employ small quantities (200-300 g) of acacia honey, which will produce a higher softness in taste and complex perfumes. The "brewing sugar", made from cereals, is a good alternative not only for wort making but also for bottling.

MALT EXTRACT

Malt extracts are produced from malt cereals (mostly barley and wheat) composing the concentrated wort. Pale, amber and dark types are available, in liquid or powdery form. The liquid extract contains around 20% water. The powder dry extract can be easily dosed and is a long-life product. We recommend to replace the requested sugar quantity with 50% powder malt extract (500 g malt + 500 g sugar). As a result, you will increase malt's taste and foam will last more.

Adding 1 kg dry malt extract and 50% requested sugar to hopped malt packs used to brew 23 litres, you will increase the full-bodied character and the taste's structure without altering the balance between the ingredients stated in the original recipe.

Using malt extracts means increasing also the final gravity, 1/1000 every 100 g.

WATER

It is the easiest ingredient to find and, at the same time, the most difficult to value. It is very important to calculate water hardness: sweet water (with low levels of calcium carbonate) is suitable to brew Lagers and Pils, medium water to produce English Ales and Munichs, and hard water is suitable to brew Darks and Stouts. The drinking water supplied by the water main contains high percentages of chlorine and calcium carbonate. Chlorine level is considered excessive when it produces an unpleasant smell. Chalky water should be boiled before the use.

The "hard-to-please" homebrewer uses mineral water for its batches, because it can verify water hardness (in °F – French degrees) and there is no trace of chlorine. Whether you are a demanding homebrewer or not, it is certain that the use of mineral water in the brewing process guarantees a higher-quality finished product.

CLEANING\SANITIZING SOLUTION

It is composed of a specific product, which cleans and sanitizes the brewing tools at the same time. Dissolve 4 g product in 1 l cold water and wash the tools. In this way, you will reduce the bacterial contamination and guarantee an efficient fermentation process. It is not necessary to rinse tools and bottles with water, you only need to let them drain.

AIRLOCK

The airlock pulls out the carbon dioxide from the fermenter and, at the same time, prevents air to get in touch with the wort. When fermentation ends, the bubbling produced by the airlock will gradually stop. At this stage, you should check the finished fermentation by using the hydrometer.

HYDROMETER

It is a useful tool employed to measure the wort's gravity, so that it is possible to establish when fermentation ends and bottling can start. Its two yellow bands help you understand respectively the initial wort gravity (1040-1060) and the final gravity (1002-1008), useful information for the bottling stage. In order to read the measures registered by the hydrometer, you should immerse the tool inside the cylinder, previously filled with some wort.

TAP

During the bottling stage, insert the tap's nozzle inside the bottle. Remember: tilt the bottle in order to let the liquid flow on its inner side. In this manner, excessive foam will not be formed, avoiding both delays in the bottling procedure and risks of an exaggerated wort oxygenation.

BOTTLES

We recommend to use crown-capped bottles with a ½ litre capacity, or the typical beer bottles with a 33 cl and 66 cl capacity. 1 litre bottles, which were previously filled with mineral water, should not be used, because glass is too thin to stand the carbon dioxide and you could run the risk of damaging them.

Particularly suitable for bottling are champagne bottles with a 75 cl capacity.

In order to make cleaning easier, we recommend to rinse bottles with hot water after the use. In this manner, sediments will not be stuck to the bottom.

GLASSES

During the tasting stage, in order to obtain a long lasting foam, it is fundamental to pour beer into degreased and perfectly sanitized glasses, without trace of cleaning products. Rinsing glasses with a teaspoon of baking soda and some warm water will clean/sanitize them perfectly.

MR. MALT BASE

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0510175	LAGER	1,5 kg	23	1,0 kg	3,8 %	1002-4	18/27	<9
0510185	YORKSHIRE BITTER	1,5 kg	23	1,0 kg	3,8 %	1002-4	18/23	22/28
0510195	MILD	1,5 kg	23	1,0 kg	3,8 %	1002-4	17/23	85/105
0510190	BITTER	1,5 kg	23	1,0 kg	3,8 %	1002-4	45/55	27/33
0510180	PILSNER	1,5 kg	23	1,0 kg	3,8 %	1002-4	25/35	<7

MR. MALT PREMIUM

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0510200	LAGER	1,8 kg	23	1,0 kg	4,5 %	1004-6	18/27	<9
0510215	YORKSHIRE BITTER	1,8 kg	23	1,0 kg	4,5 %	1004-6	32/40	27/33
0510230	MUNICH DUNKEL	1,8 kg	23	1,0 kg	4,5 %	1004-6	17/23	85/105
0510220	BITTER	1,8 kg	23	1,0 kg	4,5 %	1004-6	45/55	27/33
0510205	PILSNER	1,8 kg	23	1,0 kg	4,5 %	1004-6	25/35	<7
0510210	WEIZEN	1,8 kg	23	1,0 kg	4,5 %	1004-6	25/35	<7
0510235	TRADITIONAL BROWN ALE	1,8 kg	23	1,0 kg	4,5 %	1004-6	18/21	80/120
0510225	INDIA PALE ALE	1,8 kg	23	1,0 kg	4,5 %	1004-6	17/23	22/28

MR. MALT SPECIAL

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0510240	BOHEMIAN PILSNER	1,8 kg	20	1,0 kg	4,6 %	1006-8	25/35	<7
0510255	LONDON PORTER	1,8 kg	17	1,0 kg	6,0 %	1006-8	17/23	90/100
0510245	STRONG ALE	1,8 kg	13	0,7 kg	7,5 %	1006-8	50/60	50/60
0510260	IRISH TYPE STOUT	1,8 kg	13	0 kg	4,5 %	1006-8	50/60	225/275
0510250	BARLEY WINE	1,8 kg	7	0 kg	8,5 %	1010-12	50/60	28/33

MUNTONS CONNOISSEURS

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0530310	CONTINENTAL LAGER	1,8 kg	23	1,0 kg	4,5 %	1008	45/55	16/20
0530315	PILSNER	1,8 kg	23	1,0 kg	4,5 %	1008	25/35	<7
0530285	EXPORT PILSNER	1,8 kg	23	1,0 kg	4,5 %	1008	25/35	8/12
0530320	WHEAT	1,8 kg	23	1,0 kg	4,5 %	1008	25/35	<10
0530325	BOCK	1,8 kg	23	1,0 kg	4,5 %	1008	17/23	85/105
0530330	YORKSHIRE BITTER	1,8 kg	23	1,0 kg	4,5 %	1008	32/40	27/33
0530335	TRADITIONAL BITTER	1,8 kg	23	1,0 kg	4,5 %	1008	45/55	27/33
0530340	NUT BROWN ALE	1,8 kg	23	1,0 kg	4,5 %	1008	17/23	85/105
0530345	INDIA PALE ALE	1,8 kg	23	1,0 kg	4,5 %	1008	17/23	22/28
0530350	EXPORT STOUT	1,8 kg	23	1,0 kg	4,5 %	1008	50/60	225/275

MUNTONS PREMIUM

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0530270	LAGER	1,5 kg	23	1,0 kg	3,8 %	1008	25/35	8/12
0530275	CANADIAN STYLE LAGER	1,5 kg	23	1,0 kg	3,8 %	1008	25/35	8/12
0530290	MEXICAN CERVEZA	1,5 kg	23	1,0 kg	3,8 %	1008	45/55	8/12
0530280	PILSNER	1,5 kg	23	1,0 kg	3,8 %	1008	25/35	<7
0530295	MILD	1,5 kg	23	1,0 kg	3,8 %	1008	17/23	85/105
0530300	SCOTTISH HEAVY ALE	1,5 kg	17	1,0 kg	5,1 %	1010	45/55	50/60
0530305	BARLEY WINE	1,5 kg	13,5	1,0 kg	7,5 %	1008	33/47	27/33

MUNTONS GOLD

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0530355	CONTINENTAL PILSNER	3,0 kg	23	0 kg	4,2 %	1014	27/33	5/7
0530360	INDIA PALE ALE	3,0 kg	23	0/1,0 kg	4,2/6,0 %	1014	17/23	22/28
0530365	OLD ENGLISH BITTER	3,0 kg	23	0 kg	4,2 %	1014	45/55	27/33
0530370	HIGHLAND HEAVY ALE	3,0 kg	23	0 kg	4,2 %	1014	45/55	50/60
0530375	DOCKLANDS PORTER	3,0 kg	23	0 kg	4,2 %	1014	17/23	90/100
0530380	IMPERIAL STOUT	3,0 kg	23	0 kg	4,2 %	1014	50/60	225/275

MUNTONS PREMIUM GOLD

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0530385	MIDAS TOUCH GOLDEN ALE	3,6 kg	23	0 kg	5,0 %	1014	35/45	10/15
0530390	SMUGGLERS SPECIAL PREMIUM ALE	3,6 kg	23	0 kg	5,0 %	1014	34/45	15/20
0530395	OLD CONKERWOOD BLACK ALE	3,6 kg	23	0 kg	5,0 %	1014	33/47	84/111
0530400	SANTA'S WINTER WARMER	3,6 kg	20,5	0 kg	5,7 %	1014	34/45	15/20

BREWFERM BELGIAN

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0560480	PILS	1,5 kg	20/12	1,0/0 kg	4,6 %	1010	n.d.	n.d.
0560490	BIERE BLANCHE	1,5 kg	15	0,75 kg	5,0 %	1010	n.d.	n.d.
0560500	AMBIORIX	1,5 kg	15	1,075 kg	6,5 %	1010	n.d.	n.d.
0560505	GOLD	1,5 kg	12	0,5 kg	5,5 %	1010	n.d.	n.d.
0560515	GALLIA	1,5 kg	12	0,5 kg	5,5 %	1010	n.d.	n.d.
0560525	OLD FLEMISH BROWN	1,5 kg	12	0,83 kg	6,0 %	1010	n.d.	n.d.
0560530	ABDIJBIER	1,5 kg	9	0,5 kg	8,0 %	1010	n.d.	n.d.
0560540	DIABLO	1,5 kg	9	0,5 kg	8,0 %	1010	n.d.	n.d.
0560550	GRAN CRU	1,5 kg	9	0,5 kg	8,0 %	1010	n.d.	n.d.
0560560	TRIPPEL	1,5 kg	9	0,5 kg	8,0 %	1010	n.d.	n.d.
0560570	CHRISTMAS	1,5 kg	7	0 kg	8,0 %	1020	n.d.	n.d.
0560575	KRIEK	1,5 kg	12	0,5 kg	5,5 %	1010	n.d.	n.d.
0560580	FRAMBOISE	1,5 kg	12	0,5 kg	6,0 %	1010	n.d.	n.d.
0560585	ORANJE BOCK	1,5 kg	12	0,5 kg	6,0 %	1010	n.d.	n.d.

BLACK ROCK NEW ZEALAND

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0570593	DRY LAGER	1,7 kg	23	1,0 kg	3,8 %	1002	16/21	<7
0570597	LAGER	1,7 kg	23	1,0 kg	3,8 %	1002	18/21	<7
0570603	DRAUGHT	1,7 kg	23	1,0 kg	3,8 %	1002	20/30	15/25
0570607	COLONIAL LAGER	1,7 kg	23	1,0 kg	3,8 %	1002	21/25	8/12
0570613	INDIA PALE ALE	1,7 kg	23	1,0 kg	3,8 %	1002	21/25	22/28
0570615	EXPORT PILSNER	1,7 kg	23	1,0 kg	4,2 %	1006	25/35	6/10
0570620	BITTER	1,7 kg	23	1,0 kg	4,2 %	1006	30/40	27/33
0570625	WHISPERING WHEAT	1,7 kg	23	1,0 kg	4,2 %	1006	17/22	6/10
0570630	BOCK	1,7 kg	23	1,0 kg	4,2 %	1006	17/23	80/100
0570635	NUT BROWN ALE	1,7 kg	23	1,0 kg	4,2 %	1006	17/22	80/100
0570640	MINER'S STOUT	1,7 kg	23	1,0 kg	4,2 %	1006	40/50	170/220

BREWMAKER PREMIUM

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0540415	PILSNER	1,8 kg	23	1,0 kg	4,8 %	1008-10	25-35	8-12
0540410	LAGER	1,8 kg	23	1,0 kg	4,8 %	1008-10	45-55	16-20
0540420	INDIA PALE ALE	1,8 kg	23	1,0 kg	4,8 %	1008-10	17-23	22-28
0540425	YORKSHIRE BITTER ALE	1,8 kg	23	1,0 kg	4,8 %	1008-10	32-40	27-33
0540430	SCOTTISH HEAVY	1,8 kg	23	1,0 kg	4,8 %	1008-10	45-55	50-60
0540435	STRONG EX. BITTER ALE	1,8 kg	23	1,0 kg	4,8 %	1008-10	45-55	50-60
0540440	MILD	1,8 kg	23	1,0 kg	4,8 %	1008-10	17-23	90-100
0540445	IRISH VELVET STOUT	1,8 kg	23	1,0 kg	4,8 %	1008-10	50-60	225-275

BREWMAKER BEST OF BRITISH

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0540450	LAGER	3,0 kg	23	0 kg	4,5 %	1010-12	25-35	8-12
0540455	INDIA PALE ALE	3,0 kg	23	0 kg	4,5 %	1010-12	17-23	22-28
0540460	YORKSHIRE BITTER	3,0 kg	23	0 kg	4,5 %	1010-12	32-40	27-33
0540465	OLD ENGLISH BITTER	3,0 kg	23	0 kg	4,5 %	1010-12	45-55	27-33
0540470	OLD LONDON PORTER	3,0 kg	23	0 kg	4,5 %	1010-12	17-23	90-100

COOPERS

Code	Quality	Weight	Litres	Sugar to be added	Alcohol	Final gravity	IBU	EBC
0590645	LAGER	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590655	EUROPEAN LAGER	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590670	HERITAGE LAGER	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590665	CANADIAN BLONDE	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590675	MEXICAN	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590650	PILSNER	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590660	AUSTRALIAN PALE ALE	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590680	WHEAT BEER	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590705	ENGLISH BITTER	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590690	REAL ALE	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590685	DRAUGHT	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590695	INDIA PALE ALE	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590710	DARK ALE	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590715	STOUT	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590700	SPARKLING ALE	1,7 kg	23	1,0 kg	3,8 %	1006	n.d.	n.d.
0590720	GINGER BEER	0,98 kg	20	1,0 kg	3,5 %	1008	n.d.	n.d.

COMPARISON BETWEEN VISUAL EVALUATION AND EBC COLOUR

Visual evaluation	very pale	golden	light amber	dark amber	dark	black
EBC Colour	4/9	10/15	16/35	36/45	46/100	>100

LEGENDA

IBU: Measurement unit indicating hops' bitterness. Higher is the value, bitterer it is.

EBC: Measurement unit indicating colour. Higher is the value, darker it is.

Values referred to alcohol, bitterness and colour are approximate.

LAGER: The most diffused beer in the world, everyone would love it! Its colour can be pale or golden, light/medium-bodied, low/medium hopped. To be served cold, at 8°C.

PILSNER: The pleasant and slightly bitter aftertaste produced by the abundant use of Czech hop Saaz, makes this beer particularly refreshing. Pale straw-yellow, golden and light-bodied beer. To be served very cold, at 6°C.

BITTER: Typical English amber-copper beer, characterised by a delicate hop perfume. Medium-bodied, bitter aftertaste. To be served at 12°C.

MILD BROWN ALE: One of the less bitter ales, with a marked malt taste and final hazelnut notes. It can have different brown shades with a dense and creamy foam. To be served at 12°C.

STOUT: Typical Irish black beer, full-bodied and bitter. Creamy and long-lasting foam. Suitable for wiser admirers. To be served cold, at 14°C.

BELGIAN SPECIALTIES
Considered the highest expression of the brewing art. They compose a wide range of beers, satisfying every personal taste: from the light and refreshing Pils and fruity Kriek and Framboise, to Adbjieber, whose recipe is jealously guarded in Abbeys.

ENGLISH SPECIALTIES
The most famous traditional drinks in the United Kingdom.

Yorkshire: The richest and sweetest amber Bitter, its foam is creamy.

Draught: Light amber beer in the typical New Zealand style with a very refreshing taste.

IPA: Originally brewed to stand the long journeys from England to India, it had to have a higher alcoholic and bitter level in order to be conserved until the last days of the navy cross.

London Porter: Dark beer with light roasted barley and licorice scents and hazelnut end notes. It is one of the most ancient recipes. Its name reminds of the porters and other workers employed in the London port, who appreciated its nourishing properties.

Strong Ale: Full-bodied and very alcoholic beer, not intensely hopped.

Barley Wine: Suitable for special occasions. Every English specialty should be served at 12°C.

GERMAN SPECIALTIES

Weizen: composed of a very high wheat malt percentage, producing a slightly acid and refreshing taste. Pale hazy, golden, not very hopped beer. To be served cold, at 8°C.

Bock: brown slightly hopped beer, with an intense taste of malt and caramel. To be served at 12°C.



P.a.b. s.r.l.

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