

Bolek podòjny AGENT

- Gravity **19.8 BLG**
- ABV **8.7 %**
- IBU **23**
- SRM **22.7**
- Style **Doppelbock**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **31.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **35.4 liter(s)**
- Total mash volume **45.8 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **35.4 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **31.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Munich Malt 10L	4.5 kg (43.3%)	77 %	20
Grain	Briess - Pilsen Malt	2.5 kg (24%)	80.5 %	2
Grain	Briess - Vienna Malt	1.5 kg (14.4%)	77.5 %	7
Grain	Caramunich® typ I	0.45 kg (4.3%)	73 %	80
Grain	Caraamber	0.23 kg (2.2%)	75 %	59
Grain	Weyermann - Carapils	0.23 kg (2.2%)	78 %	4
Grain	Special w malt	0.23 kg (2.2%)	65.2 %	300
Grain	Weyermann - Melanoiden Malt	0.28 kg (2.7%)	81 %	53
Grain	Crystal	0.12 kg (1.2%)	72 %	236
Grain	Biscuit Malt	0.12 kg (1.2%)	79 %	45
Grain	Weyermann - Carafa I	0.12 kg (1.2%)	70 %	690
Grain	Briess - Chocolate Malt	0.12 kg (1.2%)	60 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	50 g	40 min	5.9 %
Boil	Premiant	55 g	5 min	5.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP838 - Southern German Lager Yeast	Lager	Liquid	350 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Water Agent	lactic acid	2.5 g	Mash	60 min
Water Agent	Calcium chloride	10.4 g	Mash	60 min
Water Agent	Calcium sulphate	9.3 g	Mash	60 min
Fining	Super Irish Moss	1 g	Boil	15 min