

Kmicic

- Gravity **18.9 BLG**
- ABV **8.2 %**
- IBU **40**
- SRM **32.5**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **14.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **17.4 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **50 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **13 liter(s)** of strike water to **57.4C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **50 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Caramunich Type 2	0.3 kg (6.9%)	--- %	120
Grain	Caraaroma	0.2 kg (4.6%)	78 %	400
Grain	Caramel/Crystal Malt - 80L	0.4 kg (9.2%)	74 %	158
Grain	Briess - Chocolate Malt	0.2 kg (4.6%)	60 %	690
Grain	Weyermann - Vienna Malt	1.5 kg (34.5%)	81 %	8
Grain	Weyermann - Munich Malt - 10L	1 kg (23%)	77 %	20
Grain	Weyermann - Light Munich Malt	0.5 kg (11.5%)	82 %	14
Grain	Oats, Flaked	0.25 kg (5.7%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	26 g	60 min	4 %
Boil	Lublin (Lubelski)	25 g	40 min	4 %

Boil	Lublin (Lubelski)	26 g	20 min	4 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.6 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	Sliwka suszona	100 g	Boil	30 min
Flavor	Płatki dębowe	10 g	Secondary	15 day(s)