

Bohemskie ciemne

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **30**
- SRM **19.5**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **5.2 liter(s) / kg**
- Mash size **26.5 liter(s)**
- Total mash volume **31.6 liter(s)**

Steps

- Temp **66.6 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **26.5 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **90 min** at **66.6C**
- Keep mash **10 min** at **78C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Pale Ale	2.5 kg (49%)	79 %	6
Grain	Strzegom Monachijski typ I	2 kg (39.2%)	79 %	16
Grain	Strzegom Karmel 150	0.25 kg (4.9%)	75 %	150
Grain	Strzegom Karmel 600	0.25 kg (4.9%)	68 %	601
Grain	Weyermann - Dehusked Carafa II	0.1 kg (2%)	70 %	837

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Tradition	20 g	80 min	5.2 %
First Wort	Tradition	5 g	30 min	5.5 %
Boil	Saaz (Czech Republic)	25 g	30 min	4.5 %
Boil	Saaz (Czech Republic)	25 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM30 Bohemska rapsodia	Lager	Slant	188.68 ml	Fermentum Mobile
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Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	3.77 g	Boil	15 min