

Bohemskie ciemne (wg wiki.piwo.org)

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **19.5**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **60 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **15 min** at **64C**
- Keep mash **60 min** at **72C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (42.1%)	81 %	4
Grain	Monachijski	2 kg (42.1%)	80 %	16
Grain	Caramunich® typ I	0.5 kg (10.5%)	73 %	80
Grain	Carafa	0.25 kg (5.3%)	70 %	900

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hopfenpellets Safir	75 g	60 min	3.5 %
Aroma (end of boil)	Hopfenpellets Saaz	35 g	20 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saaflage s23	Lager	Dry	11 g	Saf