

Czeski

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **40**
- SRM **3.5**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **16.6 liter(s)**

Steps

- Temp **72 C**, Time **40 min**
- Temp **64 C**, Time **40 min**
- Temp **80 C**, Time **30 min**

Mash step by step

- Heat up **12.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **30 min** at **80C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.6 kg (86.7%)	81 %	4
Grain	Monachijski	0.4 kg (9.6%)	80 %	16
Grain	Karmelowy Jasny 30EBC	0.15 kg (3.6%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	40 g	60 min	4.5 %
Boil	Premiant	35 g	30 min	8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Dry	10 g	Mangrove Jack's