

## czeski lezak tmavy

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **32**
- SRM **17.2**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **26.9 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **25.1 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

### Mash step by step

- Heat up **19.5 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	2.5 kg (44.8%)	80.5 %	2
Grain	Monachijski	2.1 kg (37.6%)	80 %	16
Grain	Strzegom Karmel 150	0.5 kg (9%)	75 %	150
Grain	Carafa II	0.18 kg (3.2%)	70 %	812
Grain	Acid Malt	0.3 kg (5.4%)	58.7 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	25 g	60 min	8 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	30 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	30 g	10 min	4.5 %
Whirlpool	Saaz (Czech Republic)	20 g	0 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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w34	Lager	Slant	160 ml	fermentis
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