

## czeski lezak tmavy

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **23**
- SRM **16.8**
- Style **Schwarzbier**

### 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 **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.9 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **17.2 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (43.6%)	81 %	4
Grain	Monachijski	2 kg (34.9%)	80 %	16
Grain	Strzegom Karmel 150	0.5 kg (8.7%)	75 %	150
Grain	Carafa II	0.23 kg (4%)	70 %	812
Grain	Płatki owsiane	0.5 kg (8.7%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	25 g	60 min	8 %
Boil	Saaz (Czech Republic)	25 g	15 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Slant	350 ml	---

## Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc T	2.5 g	Boil	10 min

## Notes

- Carafa typ II na ostatnie 10 min zacierania  
*Dec 4, 2024, 8:15 PM*