

## kozlak benchura

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **20**
- SRM **13.3**
- Style **Traditional Bock**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.8 liter(s)**
- Total mash volume **15.8 liter(s)**

### Steps

- Temp **50 C**, Time **15 min**
- Temp **100 C**, Time **15 min**
- Temp **70 C**, Time **10 min**
- Temp **100 C**, Time **15 min**
- Temp **71 C**, Time **15 min**
- Temp **75 C**, Time **1 min**

### Mash step by step

- Heat up **11.8 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **10 min** at **70C**
- Keep mash **15 min** at **71C**
- Keep mash **1 min** at **75C**
- Keep mash **15 min** at **100C**
- Keep mash **15 min** at **100C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2.3 kg (58.2%)	79 %	10
Grain	Pilzneński	1 kg (25.3%)	81 %	4
Grain	Rahr - Red Wheat Malt	0.3 kg (7.6%)	85 %	89
Grain	Weyermann Caramunich 3	0.3 kg (7.6%)	76 %	150
Grain	Biscuit Malt	0.05 kg (1.3%)	79 %	45

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	hallertauer taurus	8 g	60 min	15.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
w 30-70	Lager	Slant	200 ml	---

## Extras

Type	Name	Amount	Use for	Time
Fining	whirlflock	3.5 g	Boil	15 min

## Notes

- dekokcja dwuwarowa  
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