

Kozlak

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **25**
- SRM **16.2**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **31.3 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **25 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **25 min** at **72C**
- Sparge using **22.2 liter(s)** of **76C** water or to achieve **31.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	4 kg (52.3%)	80 %	16
Grain	Strzegom Wiedeński	2.5 kg (32.7%)	79 %	10
Grain	Aroma CastleMalting	0.35 kg (4.6%)	78 %	100
Grain	Strzegom Karmel 300	0.3 kg (3.9%)	70 %	299
Grain	Słód Caramunich Typ II Weyermann	0.5 kg (6.5%)	73 %	120

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum pl	20 g	60 min	13.5 %
Boil	Perle	20 g	15 min	5.7 %

Extras

Type	Name	Amount	Use for	Time
Finning	Whirlloc	2.5 g	Boil	10 min