

# Koźlaczek

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **22**
- SRM **15.3**
- 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 **13 %/h**
- Boil size **34 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **30.1 liter(s)**

## Steps

- Temp **63 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **21.5 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **35 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **34 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	2.5 kg (29.1%)	79 %	16
Grain	Strzegom Pilzneński	3 kg (34.9%)	80 %	4
Grain	Strzegom Monachijski typ II	0.9 kg (10.5%)	79 %	22
Grain	Weyermann - Vienna Malt	1.4 kg (16.3%)	81 %	8
Grain	Strzegom Karmel 150	0.3 kg (3.5%)	75 %	150
Grain	Strzegom Karmel 600	0.2 kg (2.3%)	68 %	601
Grain	Biscuit Malt	0.3 kg (3.5%)	79 %	50

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Tradition	20 g	10 min	5 %
Boil	Tradition	50 g	80 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Dry	20 g	---

### Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	1.25 g	Boil	10 min

### Notes

- karmelowy 600 dodać na ostatnie 10 min (76 st)  
*Dec 10, 2020, 8:24 PM*