

kozietek

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **26**
- SRM **14.1**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.6 liter(s)**
- Total mash volume **34.2 liter(s)**

Steps

- Temp **63 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **25.6 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **35 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	2 kg (23.4%)	79 %	16
Grain	Strzegom Pilzneński	3 kg (35.1%)	80 %	4
Grain	Strzegom Wiedeński	2.5 kg (29.2%)	79 %	10
Grain	Strzegom Karmel 600	0.2 kg (2.3%)	68 %	601
Grain	strzegom red active	0.5 kg (5.8%)	70 %	35
Grain	BESTMALZ - Best Melanoidin	0.35 kg (4.1%)	75 %	71

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	11.5 %
Boil	Hallertau Tradition	35 g	30 min	5 %
Boil	Hallertau Tradition	30 g	10 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M76 Bavarian Lager	Lager	Dry	20 g	---
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Extras

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