

Koziolek Matolek (Kozlak wedzony 14 piwoszarnia.pl)

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **36**
- SRM **28.4**
- 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 **70 min**
- Evaporation rate **9 %/h**
- Boil size **15.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.5 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **73.4C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6 liter(s)** of **76C** water or to achieve **15.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (44.4%)	81 %	4
Grain	Wędzony bukiem Viking Malt	1.5 kg (33.3%)	82 %	10
Grain	Strzegom Karmel 300	1 kg (22.2%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	25 min	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
S-23	Lager	Dry	11.5 g	Safale