

## #21 Koźlak

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **31**
- SRM **26.4**
- Style **Traditional Bock**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**

### Mash step by step

- Heat up **17.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.8 kg (47.5%)	80 %	4
Grain	Strzegom Pale Ale	1 kg (16.9%)	79 %	6
Grain	Strzegom Monachijski typ I	1 kg (16.9%)	79 %	16
Grain	Pszeniczny	0.5 kg (8.5%)	85 %	4
Grain	Caraaroma	0.2 kg (3.4%)	78 %	400
Grain	Strzegom Karmel 600	0.2 kg (3.4%)	68 %	601
Grain	Strzegom Czekoladowy ciemny	0.2 kg (3.4%)	68 %	1200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	25 g	60 min	12 %
Boil	Lublin (Lubelski)	25 g	5 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Slant	200 ml	Fermentum Mobile

### Notes

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

- Po burzliwej rozlane na pół i dodane na ~8~10L  
1 duża sparzona papryczka habanero, która prawie nic nie wniosła  
po kilku dniach 4 małe papryczki, które kurewsko podbiły ostrość  
*Sep 26, 2017, 10:50 AM*