# koźlak

- Gravity 17.5 BLG
- ABV ----
- IBU **34**
- SRM **20.1**

### **Batch size**

- Expected quantity of finished beer 14 liter(s)
- Trub loss 5 %
- Size with trub loss 14.7 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 17.7 liter(s)

### **Mash information**

- Mash efficiency **75** %
- Liquor-to-grist ratio 2.8 liter(s) / kg
- Mash size 12.9 liter(s)
- Total mash volume 17.5 liter(s)

### Steps

- Temp 63 C, Time 30 min
  Temp 72 C, Time 30 min
  Temp 76 C, Time 5 min

# Mash step by step

- Heat up 12.9 liter(s) of strike water to 70.7C
- Add grains
- Keep mash 30 min at 63C
- Keep mash 30 min at 72C
- Keep mash 5 min at 76C
- Sparge using 9.4 liter(s) of 76C water or to achieve 17.7 liter(s) of wort

### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	4 kg (87%)	79 %	16
Grain	Caraamber	0.3 kg <i>(6.5%)</i>	75 %	59
Grain	Caraaroma	0.3 kg <i>(6.5%)</i>	78 %	400

# **Hops**

Use for	Name	Amount	Time	Alpha acid
Boil	marynka	30 g	60 min	8 %