

# Kozlak Górny Wędzony

- Gravity **16.6 BLG**
- ABV ---
- IBU **31**
- SRM **17.9**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.8 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16.4 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Melanoiden Malt	0.4 kg (7.3%)	81 %	53
Grain	Briess - Smoked Malt	3 kg (55%)	80.5 %	10
Grain	Strzegom Monachijski typ II	2 kg (36.7%)	79 %	22
Grain	Strzegom Czekoladowy ciemny	0.05 kg (0.9%)	68 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Boil	lunga	10 g	5 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US 05	Ale	Slant	200 ml	---