

Wędzony Smogiem Górski Koziół Nizinny

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **30**
- SRM **17.3**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **8 %**
- Size with trub loss **11.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.3 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15.8 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **71 C**, Time **40 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **71C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony bukiem Viking Malt	1 kg (26.7%)	82 %	10
Grain	Strzegom Pilzneński	1 kg (26.7%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (26.7%)	79 %	16
Grain	Weyermann Caramunich 3	0.75 kg (20%)	76 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	7 %
Aroma (end of boil)	Saaz (Czech Republic)	10 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar