

## BRO #001.ver.1. Wędzone US-05

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **3.2**
- Style **Classic Rauchbier**

### 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 **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

### Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **13.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2.3 kg (52.3%)	80 %	3
Grain	Strzegom Pilzneński	0.8 kg (18.2%)	80 %	5
Grain	Pszeniczny	1.3 kg (29.5%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	18 g	60 min	10 %
Boil	Tradition	10 g	20 min	5.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	---

### Extras

Type	Name	Amount	Use for	Time
Flavor	Suska sechlońska	100 g	Secondary	5 day(s)
Na 10l piwa				

Other	Cold brew - jęczmień palony	200 g	Secondary	1 day(s)
Na 10l piwa Cold brew z ciemnych słodów: - jęczmień palony 200g/500ml wody/24h 4h				