

żytnie

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **23**
- SRM **6.8**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.2 liter(s)**
- Total mash volume **16.2 liter(s)**

Steps

- Temp **50 C**, Time **60 min**
- Temp **68 C**, Time **50 min**

Mash step by step

- Heat up **12.2 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **60 min** at **50C**
- Keep mash **50 min** at **68C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	2.5 kg (61.7%)	85 %	8
Grain	Pilzneński	0.5 kg (12.3%)	81 %	4
Grain	Monachijski	0.75 kg (18.5%)	80 %	16
Grain	Caramunich® typ I	0.125 kg (3.1%)	73 %	80
Grain	Płatki orkiszowe	0.18 kg (4.4%)	60 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Aurora	15 g	60 min	9.6 %
Boil	Tradition	10 g	10 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mauribrew Weiss Y1433	Wheat	Slant	200 ml	---