

AMBERROGGEN

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **18**
- SRM **9.1**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **67 C**, Time **15 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **15 min** at **67C**
- Keep mash **40 min** at **72C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Žytni	3 kg (45.5%)	85 %	8
Grain	Pilzneński	3 kg (45.5%)	81 %	4
Grain	Cara Gold Castlemalting	0.2 kg (3%)	78 %	120
Grain	Simpsons - Crystal Rye	0.2 kg (3%)	73 %	177
Grain	Melanoiden Malt	0.2 kg (3%)	80 %	39

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	25 g	60 min	3.9 %
Boil	Hallertau	5 g	30 min	3.9 %
Boil	Mandarina Bavaria	10 g	15 min	10 %
Boil	Mandarina Bavaria	20 g	10 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM41 Gwoździe i Banany	Wheat	Slant	800 ml	Fermentum Mobile
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Extras

Type	Name	Amount	Use for	Time
Spice	Curacao	10 g	Boil	10 min
Spice	Jaśmin	10 g	Boil	10 min