

American RYE BROWN ALE

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **29**
- SRM **25.3**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **70 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Maris Otter Extra	1 kg (22.2%)	80 %	4
Grain	Żytni	2 kg (44.4%)	85 %	8
Grain	Weyermann - Pilsner Malt	1 kg (22.2%)	81 %	4
Grain	Strzegom Czekoladowy jasny	0.25 kg (5.6%)	68 %	400
Grain	Weyermann - Dehusked Carafa III	0.25 kg (5.6%)	70 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus	20 g	40 min	15.4 %
Boil	Mosaic	50 g	0 min	10 %
Boil	Mosaic	50 g	0 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Ale	Dry	11 g	---