

test

- Gravity **15.4 BLG**
- ABV ---
- IBU **41**
- SRM **6.9**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **75C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Rye Malt	2 kg (33.3%)	63 %	12
Grain	Pale Ale	4 kg (66.7%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	30 g	60 min	13.1 %
Dry Hop	Cascade	40 g	5 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
test	Ale	Dry	11 g	---