

#18 RYE IPA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **64**
- SRM **10.5**
- 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 **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **70 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.8 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (74.1%)	75 %	5
Grain	Rye Malt	1 kg (14.8%)	63 %	10
Grain	Strzegom Karmel 150	0.25 kg (3.7%)	75 %	150
Sugar	Cukier	0.5 kg (7.4%)	100 %	100

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Blanc	30 g	60 min	9.8 %
Boil	HBC 472 Experimental	30 g	60 min	9.2 %
Boil	HBC 472 Experimental	20 g	30 min	9.2 %
Dry Hop	HBC 472 Experimental	100 g	5 day(s)	9.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-04	Ale	Dry	11.5 g	Fermentis

Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Water Agent	łuska ryżowa	200 g	Mash	60 min