

Rye IPA

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **58**
- SRM **5.1**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (73.2%)	81 %	4
Grain	Żytni	1 kg (24.4%)	85 %	8
Grain	Weyermann - Carapils	0.1 kg (2.4%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	45 min	11 %
Aroma (end of boil)	Equinox	50 g	5 min	13.1 %
Whirlpool	Amarillo	50 g	0 min	9.5 %
Dry Hop	Amarillo	50 g	3 day(s)	9.5 %
Dry Hop	Equinox	50 g	3 day(s)	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	4 g	Mash	60 min