

Red IPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **69**
- SRM **6.9**
- Style **Red IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (75.5%)	80 %	4
Grain	Strzegom Monachijski typ II	0.8 kg (15.1%)	79 %	22
Grain	Karmelowy Jasny 30EBC	0.4 kg (7.5%)	75 %	30
Grain	Karmelowy Ciemny	0.1 kg (1.9%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	14.4 %
Boil	Ahtanum	25 g	30 min	4 %
Aroma (end of boil)	Citra	25 g	5 min	14.2 %
Boil	Citra	25 g	45 min	14.2 %
Aroma (end of boil)	Ahtanum	25 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis