

Red IPA zimno chmielona

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **30**
- SRM **5.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **1 %**
- Size with trub loss **24.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **1 %/h**
- Boil size **25 liter(s)**

Mash information

- Mash efficiency **85 %**
- 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 **14.4 liter(s)** of **76C** water or to achieve **25 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4 kg (75.5%)	82 %	4
Grain	Viking Munich Malt	0.8 kg (15.1%)	78 %	18
Grain	Karmelowy Jasny 30EBC	0.4 kg (7.5%)	75 %	30
Grain	Karmelowy Czerwony	0.1 kg (1.9%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Ahtanum	25 g	30 min	5 %
Boil	Citra	25 g	5 min	12 %
Dry Hop	Ahtanum	25 g	7 day(s)	5 %
Dry Hop	Citra	25 g	7 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	Safale