

Red Bitterness Syndrome

- Gravity **15.5 BLG**
- ABV ---
- IBU **52**
- SRM **16.7**
- Style **Red 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 **2.5 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **19.3 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **70 C**, Time **15 min**
- Temp **77 C**, Time **1 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **70C**
- Keep mash **1 min** at **77C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2.5 kg (45.3%)	85 %	7
Grain	Strzegom Monachijski typ II	1 kg (18.1%)	79 %	22
Grain	Weyermann - Melanoiden Malt	0.5 kg (9.1%)	81 %	53
Grain	Carared	1 kg (18.1%)	75 %	39
Grain	Biscuit Malt	0.5 kg (9.1%)	79 %	45
Grain	Jęczmień palony	0.02 kg (0.4%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	20 g	50 min	11.4 %
Boil	Simcoe	10 g	45 min	11.4 %
Aroma (end of boil)	Mosaic	20 g	15 min	12 %
Aroma (end of boil)	Mosaic	25 g	5 min	12 %
Dry Hop	Mosaic	15 g	6 day(s)	12 %

Yeasts

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