

Rancors Rage

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **68**
- SRM **3.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **3 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **12 %/h**
- Boil size **29.1 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (71.4%)	80 %	4
Grain	Pszeniczny	1 kg (17.9%)	85 %	4
Grain	Płatki owsiane	0.6 kg (10.7%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Whirlpool	Galaxy	40 g	15 min	15 %
Whirlpool	Citra	40 g	15 min	12 %
Whirlpool	Nelson Sauvín	40 g	15 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP002 - English Ale Yeast	Ale	Slant	100 ml	White Labs