

Angelo

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **16**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **16.2 liter(s)**

Steps

- Temp **67 C**, Time **50 min**

Mash step by step

- Heat up **12.1 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **50 min** at **67C**
- Sparge using **21.5 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Malt	3 kg (59.4%)	79 %	6
Grain	Wheat Malt	1 kg (19.8%)	81 %	6
Adjunct	Wheat	1 kg (19.8%)	75 %	3
Grain	Acid Malt	0.05 kg (1%)	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	30 g	10 min	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	10 g	---

Extras

Type	Name	Amount	Use for	Time
Water Agent	gypsum	10 g	Mash	70 min
Flavor	Grapefruit	500 g	Secondary	15 day(s)
Other	Albedo (orange, grapefruit)	400 g	Boil	15 min
Spice	Citrus zest	50 g	Secondary	15 day(s)