

CITRA PALE ALE

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **55**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **15 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **11.5 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale	3 kg (85.7%)	85 %	7
Grain	Weyermann - Carapils	0.5 kg (14.3%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10 g	60 min	13.7 %
Boil	Citra	10 g	30 min	13.7 %
Boil	Citra	30 g	10 min	13.7 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Water Agent	Siarczan magnezu	2 g	Boil	60 min