

Atak 3

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **46**
- SRM **8.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5.5 kg (78.6%)	85 %	7
Grain	Weyermann - Carared	0.7 kg (10%)	75 %	45
Grain	Weyermann - Carapils	0.4 kg (5.7%)	78 %	4
Grain	Weyermann - Melanoiden Malt	0.4 kg (5.7%)	81 %	70

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Boil	Citra	25 g	5 min	12 %
Boil	Amarillo	20 g	5 min	9.5 %
Boil	Simcoe	20 g	5 min	13.2 %
Whirlpool	Cascade	25 g	0 min	6 %
Whirlpool	Sabro	50 g	0 min	15 %
Whirlpool	Amarillo	30 g	0 min	9.5 %
Whirlpool	Cascade	25 g	0 min	6 %

Dry Hop	Citra	25 g	2 day(s)	12 %
Dry Hop	Cascade	25 g	2 day(s)	6 %
Dry Hop	Sabro	50 g	2 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	---