

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 | --- |