

Atak chmielu

- Gravity **15.2 BLG**
- ABV ---
- IBU **49**
- SRM **6.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Weyermann - Carapils | 0.2 kg (3.2%) | 78 % | 4 |
| Grain | Weyermann - Carared | 0.2 kg (3.2%) | 75 % | 45 |
| Grain | Weyermann - Melanoiden Malt | 0.2 kg (3.2%) | 81 % | 53 |
| Grain | Weyermann - Pale Ale Malt | 5.7 kg (90.5%) | 85 % | 7 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | Simcoe | 20 g | 45 min | 13.2 % |
| Boil | Simcoe | 10 g | 20 min | 13.2 % |
| Boil | Amarillo | 10 g | 20 min | 9.5 % |
| Whirlpool | Simcoe | 20 g | 15 min | 13.2 % |
| Whirlpool | Amarillo | 10 g | 15 min | 9.5 % |
| Whirlpool | Cascade | 10 g | 15 min | 6 % |
| Whirlpool | cirta | 20 g | 15 min | 11 % |
| Dry Hop | Simcoe | 40 g | 2 day(s) | 13.2 % |
| Dry Hop | Citra | 10 g | 2 day(s) | 12 % |
| Dry Hop | Amarillo | 10 g | 2 day(s) | 9.5 % |

| | | | | |
|---------|---------|------|----------|-----|
| Dry Hop | Cascade | 20 g | 2 day(s) | 6 % |
|---------|---------|------|----------|-----|

Yeasts

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