

Atak Chmielu z azzacca

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **67**
- SRM **7.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **29.2 liter(s)**

Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **28.4 liter(s)**
- Total mash volume **36.7 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **28.4 liter(s)** of strike water to **76.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **29.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (59.9%) | 80 % | 5 |
| Grain | Weyermann - Carapils | 0.2 kg (2.4%) | 78 % | 4 |
| Grain | Caramunich® typ I | 0.55 kg (6.6%) | 73 % | 80 |
| Grain | pszeniczny ciemny | 0.5 kg (6%) | 75 % | 14 |
| Grain | Cara-Pils/Dextrine | 0.2 kg (2.4%) | 72 % | 4 |
| Grain | Płatki owsiane | 0.4 kg (4.8%) | 60 % | 3 |
| Grain | Simpsons - Maris Otter | 1.5 kg (18%) | 81 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil | Warrior | 30 g | 60 min | 15 % |
| Boil | Citra | 15 g | 20 min | 12 % |
| Boil | Simcoe | 15 g | 20 min | 12 % |
| Whirlpool | Amarillo | 30 g | 0 min | 6.3 % |
| Whirlpool | Cascade | 30 g | 0 min | 5.8 % |
| Whirlpool | Citra | 30 g | 0 min | 12 % |

| | | | | |
|---------------------|----------|------|----------|-------|
| Dry Hop | Citra | 30 g | 3 day(s) | 12 % |
| Dry Hop | Amarillo | 30 g | 3 day(s) | 9.5 % |
| Dry Hop | Cascade | 30 g | 3 day(s) | 5.8 % |
| Dry Hop | Sybillia | 30 g | 3 day(s) | 3.5 % |
| Boil | Azacca | 20 g | 20 min | 12 % |
| Aroma (end of boil) | Azacca | 30 g | 0 min | 14 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------------|------|-------|--------|-------------|
| Wyeast - 1056 American Ale | Ale | Slant | 200 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------|--------|---------|--------|
| Fining | wirflook | 10 g | Boil | 15 min |
| Water Agent | Gips | 4 g | Mash | 70 min |