

pale ale 2016

- Gravity **14.3 BLG**
- ABV ---
- IBU **48**
- SRM **6.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|-----|
| Grain | Weyermann - Pilsner Mal | 2.4 kg (45.3%) | 80 % | 5 |
| Grain | Weyermann - Pale Ale Malt | 1.5 kg (28.3%) | 80 % | 6.5 |
| Grain | Weyermann - Light Munich Malt | 0.45 kg (8.5%) | 80 % | 7 |
| Grain | Carahell | 0.8 kg (15.1%) | 77 % | 25 |
| Grain | Abbey Castle | 0.15 kg (2.8%) | 75 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil | Magnum | 12 g | 60 min | 13.5 % |
| Boil | Centennial | 6 g | 30 min | 9.7 % |
| Boil | Columbus/Tomahawk/Zeus | 7 g | 30 min | 16.8 % |
| Boil | Columbus/Tomahawk/Zeus | 8 g | 15 min | 16.8 % |
| Boil | Centennial | 9 g | 15 min | 9.7 % |
| Boil | Columbus/Tomahawk/Zeus | 10 g | 2 min | 16.8 % |
| Boil | Centennial | 10 g | 2 min | 9.7 % |
| Dry Hop | Columbus/Tomahawk/Zeus | 100 g | 5 day(s) | 16.8 % |

| | | | | |
|---------|------------|-------|----------|-------|
| Dry Hop | Centennial | 100 g | 5 day(s) | 9.7 % |
| Dry Hop | Cascade | 100 g | 5 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g | Boil | 15 min |

Notes

- wyszło przed fermentacją 21L ... 13,1 blg, celowałem w 12- 12,5 przy ilości gotowego piwa 22L.. na upartego wyszło by 22l brzezki nastawnej, ale złało by się trochę chmielin pewnie... drożdże zadane w 17stopniach.. pierwsze 2 dni z obawy przed gwałtownym startem fermentacji w 15 stopniach zewnętrznej temp. później spróbujemy 19st.
Feb 26, 2017, 10:32 PM