

BRETT IPA v3 #44

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **54**
- SRM **5.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

Mash information

- Mash efficiency **78.5 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **75C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|-----------------|--------|-----|
| Grain | Bestmalz - pilzneński | 2.25 kg (41.7%) | 80.5 % | 4 |
| Grain | Bruntal - pilzneński | 1.25 kg (23.1%) | 81 % | 4 |
| Grain | Weyermann - Pale Ale | 0.1 kg (1.9%) | 79 % | 6.5 |
| Grain | Bestmalz - pszeniczny | 0.6 kg (11.1%) | 82 % | 4.5 |
| Grain | Weyermann - pszeniczny | 0.7 kg (13%) | 82 % | 4 |
| Grain | Viking - Rye Malt | 0.2 kg (3.7%) | 81 % | 8 |
| Grain | Bestmalz - Caramelpils | 0.2 kg (3.7%) | 75 % | 5 |
| Grain | Chateau - Crystal | 0.1 kg (1.9%) | 78 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Topaz | 7 g | 60 min | 15.5 % |
| Aroma (end of boil) | Columbus | 26 g | 20 min | 12.5 % |
| Aroma (end of boil) | Centennial | 30 g | 15 min | 9.4 % |
| Aroma (end of boil) | Palisade | 51 g | 5 min | 6.1 % |
| Aroma (end of boil) | Galaxy | 10 g | 5 min | 14.5 % |

| | | | | |
|---------|---------|------|----------|--------|
| Dry Hop | Cascade | 20 g | 5 day(s) | 7.1 % |
| Dry Hop | Mosaic | 40 g | 5 day(s) | 12 % |
| Dry Hop | Citra | 40 g | 5 day(s) | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------|------|-------|--------|------------|
| Amalgamation Brett Super Blend | Ale | Slant | 150 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------------|--------|---------|-------|
| Water Agent | Gips | 5.5 g | Mash | --- |
| Fining | irish moss | 3 g | Boil | 7 min |
| Water Agent | kwas mlekowy 80% [ml] | 4.54 g | Mash | --- |
| Water Agent | chlerek wapnia [ml] | 3.43 g | Mash | --- |
| Water Agent | sól epsom | 2 g | Mash | --- |