

brett

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **11**
- SRM **3.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (83.3%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (16.7%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|------------|--------|----------|------------|
| First Wort | Warrior | 7 g | 70 min | 15.5 % |
| Whirlpool | Cascade | 10 g | 1 min | 7.1 % |
| Whirlpool | Centennial | 10 g | 1 min | 9.4 % |
| Whirlpool | Mosaic | 10 g | 1 min | 12 % |
| Dry Hop | Cascade | 20 g | 3 day(s) | 7.1 % |
| Dry Hop | Centennial | 20 g | 3 day(s) | 9.4 % |
| Dry Hop | Mosaic | 30 g | 3 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|---|-----|--------|---------|-------------|
| Wyeast - Brettanomyces bruxellensis | Ale | Liquid | 1300 ml | Wyeast Labs |
|---|-----|--------|---------|-------------|