

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
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Wyeast - Brettanomyces bruxellensis	Ale	Liquid	1300 ml	Wyeast Labs
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