

PPAppleAle

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **31**
- SRM **5**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **10.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	0.8 kg (40%)	81 %	4
Grain	Viking Pale Ale malt	0.8 kg (40%)	80 %	5
Grain	Pszeniczny	0.2 kg (10%)	85 %	4
Grain	Karmelowy Jasny 30EBC	0.2 kg (10%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	5 g	60 min	11 %
Boil	lunga	5 g	30 min	11 %
Boil	lunga	5 g	5 min	11 %
Boil	lunga	5 g	0 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale