

SPRING APA

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **57**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **62 C**, Time **25 min**
- Temp **73 C**, Time **45 min**
- Temp **78 C**, Time **30 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **25 min** at **62C**
- Keep mash **45 min** at **73C**
- Keep mash **30 min** at **78C**
- Sparge using **21 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (83.3%)	80 %	7
Grain	Pszeniczny	1 kg (16.7%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Summit	5 g	60 min	18 %
Boil	Summit	10 g	30 min	18 %
Boil	Centennial	10 g	30 min	10.5 %
Boil	Summit	10 g	15 min	18 %
Boil	Centennial	10 g	15 min	10.5 %
Boil	Summit	10 g	10 min	18 %
Boil	Centennial	10 g	10 min	10.5 %
Boil	Cascade PL	15 g	10 min	5.2 %
Boil	Summit	10 g	5 min	18 %
Boil	Centennial	10 g	5 min	10.5 %
Boil	Cascade PL	15 g	5 min	5.2 %
Boil	Summit	15 g	0 min	18 %

Boil	Centennial	10 g	0 min	10.5 %
Boil	Cascade PL	15 g	0 min	5.2 %
Aroma (end of boil)	summit	15 g	-3 min	18 %
Aroma (end of boil)	Centennial	10 g	-3 min	10.5 %
Aroma (end of boil)	Cascade PL	15 g	-3 min	5.2 %
Dry Hop	Summit	25 g	4 day(s)	18 %
Dry Hop	Centennial	30 g	4 day(s)	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gęstwa z us05	Ale	Liquid	100 ml	moje