

## #9 APA

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **36**
- SRM **7.5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

### Steps

- Temp **67 C**, Time **20 min**
- Temp **67 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **14.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **20 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Platki orkiszowe	0.2 kg (4.8%)	80 %	4
płatki kleikowane 20 min				
Grain	Briess - Pale Ale Malt	3.7 kg (88.1%)	80 %	7
Grain	Caramunich® typ I	0.15 kg (3.6%)	73 %	80
Grain	Caramel/Crystal Malt - 120L	0.15 kg (3.6%)	72 %	236

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Marynka	15 g	60 min	10 %
Boil	Cascade	20 g	30 min	6 %
Boil	Cascade	20 g	1 min	6 %
Aroma (end of boil)	citra	25 g	5 min	14.2 %
Dry Hop	Cascade	80 g	7 day(s)	6 %
Dry Hop	Simcoe	50 g	7 day(s)	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Danstar - Nottingham	Ale	Dry	10 g	Danstar
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### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	10 min