

## APA 3

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- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **44**
- SRM **5.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **78 C**, Time **2 min**

### Mash step by step

- Heat up **22.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **70C**
- Keep mash **2 min** at **78C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	5 kg (67.6%)	80.5 %	6
Grain	Strzegom Pilzneński	1 kg (13.5%)	80 %	4
Grain	Strzegom Monachijski typ I	0.5 kg (6.8%)	79 %	16
Grain	Płatki owsiane	0.4 kg (5.4%)	60 %	3
Grain	BESTMALZ -pszeniczny Best Heidelberg Wheat Malt	0.5 kg (6.8%)	82 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	35 g	55 min	13.7 %
Aroma (end of boil)	Cascade	30 g	10 min	6 %
Aroma (end of boil)	Cascade	20 g	1 min	6 %
Aroma (end of boil)	Willamette	50 g	1 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	---

### Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	1.25 g	Boil	10 min