

## Junior APA

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- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **41**
- SRM **4.3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **12 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **29.3 liter(s)**

### Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **75 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **24.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **75 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.5 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (66.7%)	80 %	5
Grain	Strzegom Żytni	0.5 kg (11.1%)	85 %	8
Grain	Płatki owsiane	0.5 kg (11.1%)	85 %	3
Grain	Viking Dekstrynowy	0.2 kg (4.4%)	79 %	13
Grain	Caramel/Crystal Malt - 10L	0.3 kg (6.7%)	75 %	20

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	15 g	20 min	13 %
Boil	Chinook	15 g	10 min	13 %
Boil	Equinox	15 g	10 min	12.8 %
Boil	Citra	15 g	10 min	12.5 %
Aroma (end of boil)	Equinox	35 g	1 min	12.8 %
Aroma (end of boil)	Citra	35 g	1 min	12.5 %
Aroma (end of boil)	Chinook	5 g	1 min	13 %
Dry Hop	Citra	30 g	4 day(s)	11.6 %

Dry Hop	Mosaic	50 g	4 day(s)	13.2 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	100 ml	---
Gozdawa U.S. West Coast	Ale	Dry	11 g	Danstar