### **APA**

- Gravity 12.6 BLG
- ABV ----
- IBU **42**
- SRM **9.3**
- 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 60 min
- Evaporation rate 10 %/h
- Boil size 25.3 liter(s)

# **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 14 liter(s)
- Total mash volume 18.6 liter(s)

### **Steps**

- Temp **50 C**, Time **10 min** Temp **67 C**, Time **40 min** Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

# Mash step by step

- Heat up 14 liter(s) of strike water to 55C
- Add grains
- Keep mash 10 min at 50C
- Keep mash 40 min at 67C
- Keep mash 20 min at 72C
- Keep mash 10 min at 78C
- Sparge using 16 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg <i>(75.3%)</i>	79 %	6
Grain	Strzegom Monachijski typ I	1 kg <i>(21.5%)</i>	79 %	16
Grain	Słód Crystal Castlemalting	0.15 kg <i>(3.2%)</i>	78 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	30 g	60 min	9.5 %
Boil	Citra	15 g	10 min	12 %
Whirlpool	Citra	30 g	60 min	12 %
Dry Hop	Cascade	50 g	10 day(s)	6 %
Dry Hop	Amarillo	34 g	10 day(s)	9.5 %

#### **Yeasts**

Name Type Form Amount Laboratory	
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Mangrove Jack's Ale M44 US West Coast	e Dry	10 g	
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## **Notes**

 powinno być jeszcze 150 g słodu pszenicznego ale zabrakło mi Nov 25, 2016, 6:35 PM