

## Apa 82

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **38**
- SRM ---

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **11.7 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale ale	2 kg (76.9%)	--- %	---
Grain	Pszeniczny jasny	0.25 kg (9.6%)	--- %	---
Grain	Karmelowy	0.15 kg (5.8%)	--- %	---
Grain	Pale ale 2	0.2 kg (7.7%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	6 g	60 min	14.7 %
Boil	Citra	10 g	15 min	13.5 %
Boil	Amarillo	10 g	7 min	8.8 %
Boil	Citra	15 g	0 min	13.5 %
Boil	Amarillo	15 g	0 min	8.8 %

### Notes

- Na cicha poszlo: 25 gr citry, 25gr amarillo.  
*Jan 30, 2018, 6:25 PM*