

## AIPA4

- Gravity **14.7 BLG**
- ABV ---
- IBU **89**
- SRM **7.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **18.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **79 C**, Time **10 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **79C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **23 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (80.1%)	80 %	---
Grain	Strzegom Monachijski typ I	0.8 kg (16%)	79 %	18
Grain	Strzegom Karmel 150	0.194 kg (3.9%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	40 g	60 min	12 %
Aroma (end of boil)	Chinook	18 g	20 min	13 %
Aroma (end of boil)	Amarillo	25 g	15 min	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	174 ml	---

### Extras

Type	Name	Amount	Use for	Time
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Spice	rozmaryn	20 g	Boil	20 min
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