

## Na nic płacze Apache (Kwejk)

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **49**
- SRM **3.1**
- Style **White IPA**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **14.4 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **7.7 liter(s)**
- Total mash volume **9.9 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **15 min**

### Mash step by step

- Heat up **7.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **77C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.8 kg (81.8%)	81 %	4
Grain	Płatki owsiane	0.2 kg (9.1%)	85 %	3
Grain	Weyermann - Carapils	0.2 kg (9.1%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	20 g	80 min	10 %
Whirlpool	Oktawia	25 g	1 min	9 %
Whirlpool	lunga	5 g	1 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	10 ml	FM