

## APA 11,5 Blg (Marxam)

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **23**
- SRM **4.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.4 liter(s)**

### Mash information

- Mash efficiency **73.5 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.1 liter(s)**

### Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.4 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (74.5%)	80 %	5
Grain	Strzegom Wiedeński	1 kg (21.3%)	79 %	10
Grain	Karmelowy Jasny 30EBC	0.2 kg (4.3%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	4 g	60 min	12 %
Boil	Citra	14 g	30 min	12 %
Boil	Citra	10 g	5 min	12 %
Aroma (end of boil)	Amarillo	10 g	0 min	9.5 %
Aroma (end of boil)	Citra	27 g	0 min	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis