

## APA z Kardamonem

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **16**
- SRM **5.1**

### 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 **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (63.6%)	80 %	5
Grain	Pilzneński	1.5 kg (27.3%)	81 %	4
Grain	Carahell	0.5 kg (9.1%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	15 min	12 %
Aroma (end of boil)	ahatanum	15 g	5 min	12 %
Dry Hop	kardamon	20 g	---	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US 05	Ale	Dry	11.5 g	---