

# kawusia

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **35**
- SRM **4.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **12.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **21.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (94.1%)	80 %	5
Grain	Platki owsiane	0.25 kg (5.9%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	8 g	30 min	11 %
Boil	N1/69	20 g	15 min	13.4 %
Whirlpool	N1/69	30 g	10 min	13.4 %
Dry Hop	N1/69	50 g	3 day(s)	13.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar