

# Kwas

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **1**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss --- %
- Size with trub loss **14 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.9 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **23.4 liter(s)**

## Steps

- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **76.7C**
- Add grains
- Keep mash **60 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **0.7 liter(s)** of **76C** water or to achieve **16.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (41.7%)	80 %	5
Grain	Viking Pilsner malt	1.3 kg (36.1%)	82 %	4
Grain	Rice, Flaked	0.4 kg (11.1%)	70 %	2
Grain	Rye, Flaked	0.4 kg (11.1%)	78.3 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Sorachi Ace	30 g	1 min	10 %
Dry Hop	Sorachi Ace	70 g	5 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
New england	Ale	Dry	11 g	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	Wiśnia	1500 g	Secondary	7 day(s)