

# Kawaler do wzięcia

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **29**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **20.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.4 kg (68%)	80 %	5
Grain	Pilzneński	0.8 kg (16%)	81 %	4
Grain	Pszeniczny	0.5 kg (10%)	85 %	4
Grain	Płatki pszeniczne	0.3 kg (6%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	30 g	60 min	7.1 %
Boil	Cascade PL	20 g	10 min	7.1 %
Aroma (end of boil)	Cascade PL	20 g	0 min	7.1 %

## Yeasts

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