

# Zimowy Wypas krów

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **29**
- SRM **3.7**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **52 C**, Time **1 min**
- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **1 min** at **52C**
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **21 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszoniczny	3 kg (50%)	85 %	4
Grain	Viking Pale Ale malt	3 kg (50%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	15 g	50 min	13.7 %
Boil	Citra	25 g	3 min	13.7 %
Boil	Galaxy	25 g	3 min	14.5 %
Boil	Enigma (AUS)	25 g	3 min	16.5 %