

# 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 %     |