

# Zimowe Ale

---

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **43**
- SRM **16.8**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **16.2 liter(s)**

## Steps

- Temp **64 C**, Time **90 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **68.4C**
- Add grains
- Keep mash **90 min** at **64C**
- Sparge using **3.2 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield  | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Viking Pale Ale malt | 1.5 kg (55.6%) | 80 %   | 5   |
| Grain | Pszeniczny           | 0.5 kg (18.5%) | 85 %   | 4   |
| Grain | Strzegom Bursztynowy | 0.5 kg (18.5%) | 70 %   | 49  |
| Grain | Castle Cafe          | 0.2 kg (7.4%)  | 75.5 % | 500 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Oktawia | 30 g   | 60 min | 7.1 %      |

## Yeasts

| Name | Type | Form   | Amount | Laboratory |
|------|------|--------|--------|------------|
| S04  | Ale  | Liquid | 300 ml | ---        |

## Extras

| Type  | Name    | Amount | Use for   | Time     |
|-------|---------|--------|-----------|----------|
| Spice | Cynamon | 5 g    | Secondary | 2 day(s) |