

Zdrówka, a reszta się ułoży

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **31**
- SRM **32.5**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.5 liter(s)**
- Total mash volume **34 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **74 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **25.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **60 min** at **74C**
- Keep mash **5 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|--------|-----|
| Grain | Strzegom Wiedeński | 4 kg (45.5%) | 79 % | 10 |
| Grain | Strzegom Czekoladowy jasny | 1.5 kg (17%) | 68 % | 400 |
| Grain | Słód owsiany Fawcett | 2 kg (22.7%) | 61 % | 5 |
| Grain | Caramel/Crystal Malt - 120L | 1 kg (11.4%) | 72 % | 160 |
| Sugar | Milk Sugar (Lactose) | 0.3 kg (3.4%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 30 g | 60 min | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 13.9 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------|--------------------|------|------|-------|
| Spice | Cinnamon | 15 g | Boil | 5 min |
| Spice | Przyprawa korzenna | 15 g | Boil | 5 min |
| Spice | vanilia | 15 g | Boil | 5 min |
| Spice | Skórka pomarańczy | 30 g | Boil | 5 min |