

Urodzinowe

- Gravity **12.1 BLG**
- ABV ---
- IBU **18**
- SRM **4.4**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **10 min** at **72C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|------------|-------|-----|
| Grain | Strzegom Pale Ale | 3 kg (75%) | 79 % | 6 |
| Grain | Biscuit Malt | 1 kg (25%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil | flyer | 15 g | 20 min | 9 % |
| Boil | Bramling | 15 g | 20 min | 6 % |
| Dry Hop | flyer | 10 g | 3 day(s) | 9 % |
| Dry Hop | Bramling | 10 g | 3 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 10 g | Fermentis |