

# 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