

# Urodzinowe dla rodziców

- Gravity **10.7 BLG**
- ABV ---
- IBU **18**
- SRM **3.7**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.5 kg (69.4%)	80 %	4
Grain	Strzegom Pale Ale	1 kg (27.8%)	--- %	0
Grain	Weyermann - Melanoiden Malt	0.1 kg (2.8%)	81 %	53

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	30 g	50 min	2.9 %
Boil	Saaz (Czech Republic)	13 g	20 min	2.9 %
Boil	Lublin (Lubelski)	10 g	20 min	4 %
Boil	Lublin (Lubelski)	10 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis K-97	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Fining	mech irlandzki	4 g	Boil	10 min
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