

# Urodzinowe

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **24**
- SRM **25.3**
- Style **Belgian Dubbel**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 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 **63 C**, Time **50 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg (82.4%)	80 %	4
Sugar	Brown Sugar, Dark	0.25 kg (5.9%)	100 %	99
Grain	Viking Malt Cookie	0.25 kg (5.9%)	96 %	60
Grain	Weyermann - Carafa I	0.25 kg (5.9%)	70 %	900

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northdown	20 g	60 min	8.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM28 Habit opata	Ale	Liquid	200 ml	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	rodzynki	100 g	Boil	10 min