

# Urodzinowe M v.2024

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **28**
- SRM **32.5**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **27.7 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **21.8 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (62.5%)	80 %	5
Grain	Castle Cafe	0.5 kg (7.8%)	75.5 %	480
Grain	Carafa III	0.25 kg (3.9%)	70 %	1034
Grain	Viking Czekoladowy ciemny	0.25 kg (3.9%)	67 %	900
Grain	Płatki owsiane	0.9 kg (14.1%)	60 %	3
Sugar	Milk Sugar (Lactose)	0.5 kg (7.8%)	76.1 %	0

podbicie blg o około 2 pkt

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	50 g	60 min	4.2 %
Boil	Nelson Sauvín	10 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Lallemand - LalBrew American East Coast - New England	Ale	Slant	200 ml	Lallemand
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### Extras

Type	Name	Amount	Use for	Time
Spice	kakao	100 g	Secondary	5 day(s)
Spice	vanilia laska	1 g	Secondary	3 day(s)