

# Nocna Zmiana

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **10**
- SRM **3.7**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **8 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4.2 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **30 C**, Time **60 min**
- Temp **44 C**, Time **120 min**
- Temp **63 C**, Time **45 min**
- Temp **73 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **31.2C**
- Add grains
- Keep mash **60 min** at **30C**
- Keep mash **120 min** at **44C**
- Keep mash **45 min** at **63C**
- Keep mash **30 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	1.4 kg (35%)	80 %	3
Grain	Weyermann - Pale Wheat Malt	1.6 kg (40%)	85 %	5
Grain	Weyermann - Premium Pilsner Malt	0.5 kg (12.5%)	80 %	3
Grain	Weyermann - Pale Ale Malt	0.2 kg (5%)	85 %	7
Grain	Carahell	0.3 kg (7.5%)	77 %	26

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	25 g	90 min	3.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Mangrove Jack's M20 Bavarian Wheat	Wheat	Dry	11 g	---
---------------------------------------	-------	-----	------	-----