

## #209 Nic na siłę (2024)

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **25**
- SRM **26.4**
- Style **Baltic Porter**

### Batch size

- Expected quantity of finished beer **16.1 liter(s)**
- Trub loss **6 %**
- Size with trub loss **17.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **18.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.03 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **27 liter(s)**

### Steps

- Temp **44 C**, Time **15 min**
- Temp **52 C**, Time **35 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **20.3 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **35 min** at **52C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **4.8 liter(s)** of **76C** water or to achieve **18.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	VM pszeniczny	3.15 kg (47%)	85 %	4
Grain	VM pilzniejszy	1.9 kg (28.4%)	80 %	3.5
Grain	Steinbach wiedeński	0.75 kg (11.2%)	79 %	10
Grain	VM karmelowy jasny	0.65 kg (9.7%)	80 %	150
Grain	VM karmelowy ciemny	0.1 kg (1.5%)	80 %	600
Grain	Weyermann jęczmień palony	0.15 kg (2.2%)	55 %	1150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	DE Hallertau Mittelfruh 2022	75 g	60 min	3.1 %
Aroma (end of boil)	DE Hallertau Mittelfruh 2022	25 g	5 min	3.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM41 Gwoździe i Banany	Wheat	Slant	100 ml	Fermentum Mobile
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