

## #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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                        |       |       |        |                  |
|------------------------|-------|-------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Slant | 100 ml | Fermentum Mobile |
|------------------------|-------|-------|--------|------------------|