

NIEMALŻE GRODZISKIE

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **14**
- SRM **2.6**
- Style **Grodziskie**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **32.3 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **18.5 liter(s)**
- Total mash volume **22.2 liter(s)**

Steps

- Temp **38 C**, Time **30 min**
- Temp **52 C**, Time **45 min**
- Temp **63 C**, Time **20 min**
- Temp **70 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **18.5 liter(s)** of strike water to **39.8C**
- Add grains
- Keep mash **30 min** at **38C**
- Keep mash **45 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **20 min** at **70C**
- Keep mash **1 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Weyermann® Oak Smoked Wheat Malt | 2.5 kg (67.6%) | 81 % | 4 |
| Grain | Viking Pilsner malt | 1.2 kg (32.4%) | 82 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 35 g | 60 min | 3.6 % |
| Aroma (end of boil) | Lublin (Lubelski) | 10 g | 10 min | 3.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|------|-------|--------|-----------------|
| Mangrove Jack's M42 | Ale | Slant | 100 ml | Mangrove Jack's |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|---------|---------|--------|
| Fining | Whirlfloc | 0.125 g | Boil | 10 min |