

Grodziskie

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **24**
- SRM **2.4**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **66 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **20 min** at **66C**
- Keep mash **40 min** at **72C**
- Sparge using **22.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------------|------------|-------|-----|
| Grain | Pszeniczny wędzony dębem (Viking) | 2 kg (50%) | 80 % | 3 |
| Grain | Pszeniczny wędzony dębem (Weyermann) | 2 kg (50%) | 80 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | lunga | 25 g | 30 min | 11 % |
| Aroma (end of boil) | Tomyski | 50 g | 3 min | 2.8 % |
| Whirlpool | Tomyski | 50 g | 0 min | 2.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------|-------|--------|--------|------------------|
| /polowa/ FM51 Grodzie Dębowe | Wheat | Liquid | 100 ml | Fermentum Mobile |
| /polowa/ brett amalgamation | Ale | Slant | 100 ml | Yeast Bay |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------------|--------------|-----|------|--------|
| Water Agent | gips | 4 g | Mash | 60 min |
| Water Agent | sól epsom | 6 g | Mash | 60 min |
| Water Agent | sól kuchenna | 2 g | Mash | 60 min |
| Water Agent | kreda | 8 g | Mash | 60 min |
| Fining | whirflock | 2 g | Boil | 5 min |