

grodziskie 2.0 SH mandarina bavaria

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **26**
- SRM **4.2**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **25.7 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **16.2 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.1 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **24.5 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|------------------------------------|---------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 4 kg (96.6%) | 80 % | 3 |
| Adjunct | łuska orkiszowa | 0.1 kg (2.4%) | 1 % | 0 |
| Grain | Strzegom Karmel 600 | 0.04 kg (1%) | 68 % | 601 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-------------------|--------|----------|------------|
| Boil | lunga | 30 g | 30 min | 11 % |
| Whirlpool | Mandarina Bavaria | 20 g | 1 min | 10 % |
| Dry Hop | Mandarina Bavaria | 30 g | 2 day(s) | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------|-------|---------|------------------|
| FM51 Grodzie Dębowe | Wheat | Slant | 1500 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|-------|
| Fining | wirflock | 2 g | Boil | 5 min |