

Gruby Magnat Wielkopolski

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **22**
- SRM **3.1**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **8 %**
- Size with trub loss **14 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **16.2 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **6 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **17.5 liter(s)**

Steps

- Temp **68 C**, Time **90 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **3.7 liter(s)** of **76C** water or to achieve **16.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|--------------|-------|-----|
| Grain | Weyermann - Grodziski | 2 kg (80%) | 80 % | 4 |
| Grain | Pilzneński | 0.5 kg (20%) | 81 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|--------|--------|--------|------------|
| First Wort | Magnat | 8 g | 60 min | 14.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------|--------|--------|------------------|
| FM51 Grodzie Dębowe | Wheat | Liquid | 75 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------------------------|--------|---------|--------|
| Spice | łuska ryżowa sterylizowana | 100 g | Mash | 90 min |