

#57 Ciemne Grodziskie

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **38**
- SRM **18.3**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **9.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **19.6 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 2 kg (60.6%) | 80 % | 3 |
| Grain | Strzegom Pszeniczny | 0.5 kg (15.2%) | 81 % | 6 |
| Grain | Carafa | 0.4 kg (12.1%) | 70 % | 664 |
| Grain | Płatki owsiane | 0.4 kg (12.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|----------|------------|
| Boil | Citra | 50 g | 15 min | 12 % |
| Aroma (end of boil) | Citra | 50 g | 0 min | 12 % |
| Dry Hop | Citra | 100 g | 5 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------|--------|--------|------------------|
| FM51 Grodzie Dębowe | Wheat | Liquid | 30 ml | Fermentum Mobile |