

Grodziskie Wariacje III GRYKA

- Gravity **8.4 BLG**
- ABV ---
- IBU **34**
- SRM **10.5**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.4 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **70 C**, Time **40 min**
- Temp **77 C**, Time **1 min**

Mash step by step

- Heat up **9.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **70C**
- Keep mash **1 min** at **77C**
- Sparge using **26.9 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|--|----------------|-------|-----|
| Grain | Wędzony IREKS | 0.7 kg (20%) | 80 % | 18 |
| Grain | Weyermann - Pszeniczny wędzony dębem | 0.6 kg (17.1%) | 80 % | 5 |
| Grain | Kasza gryczana | 0.5 kg (14.3%) | 70 % | 80 |
| Grain | Pszeniczny | 0.4 kg (11.4%) | 85 % | 4 |
| Grain | Weyermann - Smoked Malt | 0.4 kg (11.4%) | 81 % | 6 |
| Adjunct | Płatki gryczane | 0.4 kg (11.4%) | 80 % | 80 |
| Grain | Pilzneński | 0.4 kg (11.4%) | 81 % | 4 |
| Grain | Weyermann - Acidulated Malt | 0.1 kg (2.9%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 10 % |
| Boil | Marynka | 10 g | 30 min | 10 % |
| Boil | Tradition | 15 g | 15 min | 5.5 % |
| Aroma (end of boil) | Tradition | 5 g | 1 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safbrew S-33 | Ale | Slant | 100 ml | Safbrew |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|-----------|----------|
| Fining | żelatyna | 5 g | Secondary | 5 day(s) |