

Dubbel Grodziskie

- Gravity **15.1 BLG**
- ABV ---
- IBU **35**
- SRM **12.4**
- Style **Grodziskie**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **23.9 liter(s)**

Steps

- Temp **52 C**, Time **35 min**
- Temp **70 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **17.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **35 min** at **52C**
- Keep mash **60 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------------|----------------|-------|-----|
| Grain | Weyermann - Pszeniczny wędzony dębem | 2.3 kg (38.5%) | 80 % | 5 |
| Grain | Weyermann - Smoked Malt | 2.3 kg (38.5%) | 80 % | 6 |
| Grain | Pszeniczny | 0.5 kg (8.4%) | 85 % | 4 |
| Grain | Pilzneński | 0.5 kg (8.4%) | 81 % | 4 |
| Grain | Weyermann - Carawheat | 0.3 kg (5%) | 77 % | 97 |
| Grain | Strzegom Karmel 600 | 0.05 kg (0.8%) | 68 % | 601 |
| Grain | Weyermann - Chocolate Wheat | 0.02 kg (0.3%) | 74 % | 788 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Magnum | 20 g | 60 min | 11.8 % |
| Boil | Lublin (Lubelski) | 15 g | 60 min | 5.1 % |
| Boil | Lublin (Lubelski) | 10 g | 30 min | 5.1 % |

| | | | | |
|---------------------|-------------------|------|--------|-------|
| Boil | Lublin (Lubelski) | 10 g | 10 min | 5.1 % |
| Aroma (end of boil) | Lublin (Lubelski) | 10 g | 1 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------|-------|--------|------------------|
| FM51 Grodzie Dębowe | Wheat | Slant | 50 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|-----------|----------|
| Fining | Żelatyna | 5 g | Secondary | 7 day(s) |