

Panzer Graetzer

- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **11**
- SRM **4**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------------|----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 2.5 kg (83.3%) | 82 % | 10 |
| Grain | BESTMALZ - Best Heidelberg Wheat Malt | 0.5 kg (16.7%) | 82 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 10 g | 30 min | 4 % |
| Boil | Lublin (Lubelski) | 15 g | 15 min | 4 % |
| Aroma (end of boil) | Lublin (Lubelski) | 25 g | 5 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------|--------|--------|------------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |
| FM51 Grodzie Dębowe | Wheat | Liquid | 35 ml | Fermentum Mobile |