

Strong Grodziskie

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **25**
- SRM **3.3**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|--------------|-------|-----|
| Grain | Pilzneński | 2 kg (33.3%) | 81 % | 4 |
| Grain | Grodziski pszeniczny wędzony dębem | 4 kg (66.7%) | 80 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Magnum | 30 g | 25 min | 13.5 % |
| Aroma (end of boil) | Lublin (Lubelski) | 90 g | 0 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 125 ml | Fermentis |