

Hoppy Grodzisz

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **24**
- SRM **2.5**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **34.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **42.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **36 liter(s)**

Steps

- Temp **51 C**, Time **20 min**
- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **30 liter(s)** of strike water to **54.1C**
- Add grains
- Keep mash **20 min** at **51C**
- Keep mash **45 min** at **68C**
- Keep mash **15 min** at **72C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **42.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|-------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 6 kg (100%) | 80 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil | lunga | 20 g | 60 min | 11 % |
| Aroma (end of boil) | Azacca | 10 g | 10 min | 14 % |
| Whirlpool | Azacca | 20 g | 10 min | 14 % |
| Dry Hop | Azacca | 20 g | 3 day(s) | 14 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11 g | Safbrew |