

HOPPY GRODZISKIE

- Gravity **7.3 BLG**
- ABV **2.8 %**
- IBU **19**
- SRM **4.1**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **15.6 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5.1 liter(s)**
- Total mash volume **6.8 liter(s)**

Steps

- Temp **52 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **5.1 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **30 min** at **52C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **15.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|---------------|-------|-----|
| Grain | Viking Malt - Pszeniczny wedzony dębem | 1.7 kg (100%) | 80 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|--------------------|----------------------------|--------|----------|------------|
| Boil | Sybilla (PL) - granulat | 15 g | 35 min | 6.9 % |
| Whirlpool | Sybilla (PL) - granulat | 25 g | --- | 6.9 % |
| w 75* przez 25 min | | | | |
| Dry Hop | Sybilla (PL) - granulat | 40 g | 3 day(s) | 6.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------|--------------|--------|---------|------|
| Other | Łuska ryżowa | 25 g | Mash | --- |