

# Hoppy Grodzisz

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- 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    |