

# hoppy grodziskie

- Gravity **6.6 BLG**
- ABV **2.5 %**
- IBU **35**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **3.9 liter(s)**
- Total mash volume **5.2 liter(s)**

## Steps

- Temp **39 C**, Time **50 min**
- Temp **51 C**, Time **20 min**
- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **3.9 liter(s)** of strike water to **42.1C**
- Add grains
- Keep mash **50 min** at **39C**
- Keep mash **20 min** at **51C**
- Keep mash **30 min** at **66C**
- Keep mash **15 min** at **72C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name                    | Amount          | Yield | EBC |
|-------|-------------------------|-----------------|-------|-----|
| Grain | Wędzony Dębem Weyermann | 1.04 kg (80.6%) | 80 %  | 5   |
| Grain | Pszoniczny              | 0.25 kg (19.4%) | 85 %  | 4   |

## Hops

| Use for             | Name       | Amount  | Time     | Alpha acid |
|---------------------|------------|---------|----------|------------|
| Boil                | Mosaic     | 5.52 g  | 60 min   | 11.4 %     |
| Boil                | Willamette | 13.79 g | 20 min   | 5 %        |
| Aroma (end of boil) | Willamette | 6.9 g   | 5 min    | 5 %        |
| Aroma (end of boil) | Mosaic     | 6.9 g   | 5 min    | 11.4 %     |
| Dry Hop             | Mosaic     | 7.58 g  | 8 day(s) | 11.4 %     |

## Yeasts

| Name  | Type | Form  | Amount   | Laboratory |
|-------|------|-------|----------|------------|
| us-05 | Ale  | Slant | 68.96 ml | ---        |