# grodzisz

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- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **33**
- SRM **3**
- Style **Grodziskie**

## 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 **8 %/h**
- Boil size **30.6 liter(s)**

## Mash information

- Mash efficiency **96 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **51 C**, Time **15 min**
- Temp **62 C**, Time **5 min**
- Temp **72 C**, Time **55 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **5 min** at **62C**
- Keep mash **55 min** at **72C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

## Fermentables

| Type | Name | Amount | Yield | EBC |
|---|---|---|---|---|
| Grain | bruntal grodziski | 3 kg *(75%)* | 80 % | 4 |
| Grain | Weyermann - Pale Ale Malt | 1 kg *(25%)* | 85 % | 7 |

## Hops

| Use for | Name | Amount | Time | Alpha acid |
|---|---|---|---|---|
| Boil | Northern Brewer | 30 g | 60 min | 9.3 % |
| Boil | tomyski | 25 g | 15 min | 4 % |
| Boil | tomyski | 25 g | 5 min | 4 % |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|---|---|---|---|---|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 11 g | --- |

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.