

HG test

- Gravity **7.6 BLG**
- ABV **2.9 %**
- IBU **32**
- SRM **3.7**
- Style **Grodziskie**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.8 liter(s)**
- Total mash volume **9 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **6.8 liter(s)** of strike water to **70.1C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Wewyermann - Smoked Malt | 2.25 kg (100%) | 81 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Mosaic | 10 g | 40 min | 10 % |
| Boil | Mosaic | 10 g | 20 min | 10 % |
| Aroma (end of boil) | Mosaic | 10 g | 5 min | 10 % |
| Aroma (end of boil) | Palisade | 10 g | 5 min | 7.5 % |
| Dry Hop | Palisade | 10 g | 2 day(s) | 7.5 % |
| Dry Hop | Palisade | 10 g | 1 day(s) | 7.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 8.25 g | Safbrew |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|-----------|--------|------|--------|
| Fining | Whirllock | 2.25 g | Boil | 10 min |
|--------|-----------|--------|------|--------|