

#105 Grodziskie

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **16**
- SRM **2.9**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **16.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **21.1 liter(s)**

Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **17.4 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **2 min**

Mash step by step

- Heat up **14.5 liter(s)** of strike water to **71.7C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **76C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **21.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 2.5 kg (86.2%) | 80 % | 3 |
| Grain | Viking Malt Wędzony Czereśnią | 0.4 kg (13.8%) | 82 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | lunga PL | 4 g | 45 min | 10 % |
| Boil | lunga PL | 4 g | 30 min | 10 % |
| Aroma (end of boil) | lunga PL | 15 g | 6 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 100 ml | Fermentum Mobile |

Extras

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

| | | | | |
|--------|-----------|-------|------|--------|
| Fining | Whirlfloc | 2.5 g | Boil | 12 min |
|--------|-----------|-------|------|--------|