

Grodziskowa dębina

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **21**
- SRM **5**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **21.3 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.6 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Viking Wheat Malt Wędzony Dębem | 4 kg (84.4%) | 83 % | 10 |
| Grain | Viking Wheat Malt | 0.7 kg (14.8%) | 83 % | 5 |
| Grain | Weyermann - Acidulated Malt | 0.04 kg (0.8%) | 65 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|--------|------------|
| Boil | Tradition | 30 g | 60 min | 4.3 % |
| Aroma (end of boil) | Tradition | 30 g | 20 min | 4.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |

Extras

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

| | | | | |
|-------------|---------------------|------|------|--------|
| Water Agent | gips piwowarski | 5 g | Mash | 80 min |
| Water Agent | Chlorek wapnia 33 % | 10 g | Mash | 80 min |
| Fining | whirlfloc | 5 g | Boil | 10 min |