

# Modern Grodziskie- Książęcy i Talus

- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **23**
- SRM **3**
- Style **Grodziskie**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.3 liter(s)**
- Total mash volume **11 liter(s)**

## Steps

- Temp **56 C**, Time **25 min**
- Temp **69 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **8.3 liter(s)** of strike water to **62C**
- Add grains
- Keep mash **25 min** at **56C**
- Keep mash **45 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Weyermann pszeniczny jasny | 2.5 kg (90.9%) | 90 %  | 6   |
| Grain | Weyermann - Grodziski      | 0.25 kg (9.1%) | 90 %  | 4   |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Książęcy | 10 g   | 60 min   | 7 %        |
| Boil                | Talus    | 5 g    | 60 min   | 9.5 %      |
| Aroma (end of boil) | Talus    | 10 g   | 5 min    | 9.5 %      |
| Aroma (end of boil) | Książęcy | 30 g   | 5 min    | 7 %        |
| Dry Hop             | Książęcy | 50 g   | 3 day(s) | 7 %        |
| Dry Hop             | Talus    | 15 g   | 3 day(s) | 9.5 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale K-97 | Ale  | Dry  | 11.5 g | Fermentis  |