

# Grodziskie z zestawem grejpfruta/ Modern Grodziskie

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **24**
- SRM **2.9**
- Style **Grodziskie**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **27.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **15.2 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **11.2 liter(s)** of strike water to **71.9C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (75%)	80 %	4
Grain	Grodziski pszeniczny wędzony dębem Brunalt	1 kg (25%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum Polish Hops	15 g	60 min	13.5 %
Dry Hop	Zula	50 g	3 day(s)	8.3 %
Dry Hop	Książęcy	50 g	3 day(s)	7 %

## Extras

Type	Name	Amount	Use for	Time
Flavor	zest z grejpfruta 50g	50 g	Secondary	3 day(s)
Flavor	sok z grejpfruta 500ml nfc	500 g	Secondary	10 day(s)