

# Duble Grodzisz

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **25**
- SRM **2.4**
- Style **Grodziskie**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **32.9 liter(s)**

## Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **69 C**, Time **50 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **50 min** at **69C**
- Keep mash **1 min** at **76C**
- Sparge using **22.9 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	4 kg (100%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	7.5 g	60 min	9.5 %
Boil	Magnum	7 g	60 min	12.1 %
Boil	Lomik	20 g	30 min	4.6 %
Boil	Lomik	20 g	5 min	4.6 %
Aroma (end of boil)	Lomik	20 g	2 min	4.6 %
Dry Hop	Lomik	40 g	5 day(s)	4.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Culture	800 g	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Other	Łuska ryżowa	200 g	Mash	10 min
Fining	Mech irlandzki	7 g	Boil	5 min
Fining	Karuk	10 g	Secondary	3 day(s)

## Notes

- Woda "Oaza" z Biedry:  
HCO - 220  
SO - 36  
Cl - 3  
Ca - 41  
Mg - 24  
Na - 9  
K - 2  
*Dec 18, 2018, 3:42 PM*