

# Mad Grodzisz

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **39**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

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

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	20 g	60 min	10.3 %
Whirlpool	Książęcy	40 g	20 min	7 %
Whirlpool	Zula	15 g	20 min	10.3 %
Dry Hop	Zula	50 g	3 day(s)	8.3 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Other	Łuska ryżowa	200 g	Mash	60 min
Water Agent	CaCl2	5 g	Mash	60 min

Water Agent	Lactic Acid	5 g	Mash	60 min
Fining	Whirlfloc-T	2.5 g	Boil	10 min