

# Grodziskie (Usiu) + chmiel

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- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **20**
- SRM **2.9**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **21 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15 liter(s)**

## Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **20 min** at **72C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **21 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	3 kg (100%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	iunga	8 g	60 min	11 %
Dry Hop	Palisade	80 g	2 day(s)	8.7 %
Boil	Summer	20 g	10 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11.5 g	Fermentis