

# grodziskie puławski lubelski 9blg

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **22**
- SRM **3.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **22.2 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **32 C**, Time **45 min**
- Temp **63 C**, Time **21 min**
- Temp **72 C**, Time **22 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **34C**
- Add grains
- Keep mash **45 min** at **32C**
- Keep mash **21 min** at **63C**
- Keep mash **22 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2 kg (50%)	80 %	5
Grain	Weyermann pszeniczny jasny	1 kg (25%)	80 %	6
Grain	Strzegom Pilzneński	1 kg (25%)	80 %	4.5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	20 g	60 min	8.9 %
Boil	Lublin (Lubelski)	15 g	10 min	4 %
Whirlpool	Lublin (Lubelski)	15 g	1 min	4 %
Dry Hop	Lublin (Lubelski)	30 g	7 day(s)	4 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Water Agent	mech irlandzki	10 g	Boil	10 min
Water Agent	gips piwowarski	10 g	Mash	60 min