

# Gorzki Słodziak

- Gravity **13.5 BLG**
- ABV ---
- IBU **25**
- SRM **36.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **18.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **14.6 liter(s)**

## Steps

- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **11 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **18.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (68.5%)	81 %	4
Grain	Strzegom Karmel 30	0.5 kg (13.7%)	75 %	30
Grain	Pszeniczny	0.2 kg (5.5%)	85 %	4
Grain	Oats, Flaked	0.2 kg (5.5%)	80 %	2
Grain	Czekoladowy	0.1 kg (2.7%)	60 %	1200
Grain	Jęczmień palony	0.15 kg (4.1%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	6 g	60 min	13.5 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	15 min	4 %
Boil	Marynka	6 g	30 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	6 g	Safale

## Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Flavor	laktoza	250 g	Boil	15 min
Fining	mech irlandzki	3 g	Boil	15 min
Water Agent	chlorek wapnia	4 g	Mash	---

## Notes

- słody ciemne na 72st po negatywnej próbie jodowej  
*Nov 28, 2015, 1:39 PM*