

# Stout Guines

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **34**
- SRM **37.2**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **24.7 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **19 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (60.9%)	81 %	4
Grain	Monachijski	1.5 kg (26.1%)	80 %	16
Grain	Czekoladowy	0.3 kg (5.2%)	60 %	1200
Grain	Jęczmień palony	0.45 kg (7.8%)	55 %	1135

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger (Angielski)	30 g	60 min	8.6 %
Boil	Challenger (Angielski)	20 g	20 min	8.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	10 g	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	kawa	100 g	Secondary	---