

# Gruesome Gertie

- Gravity **24.9 BLG**
- ABV **11.6 %**
- IBU **49**
- SRM **20.9**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **2 min** at **78C**
- Sparge using **5.2 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni Jasny (Weyermann)	3.75 kg (55.6%)	85 %	5
Grain	Pale Ale (Strzegom)	2 kg (29.6%)	80.5 %	6
Grain	Special X (BestMalz)	0.5 kg (7.4%)	80 %	400
Sugar	Cukier kandyzowany	0.5 kg (7.4%)	78 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Blanc	30 g	60 min	11 %
Boil	Lomik	20 g	60 min	8.9 %
Whirlpool	Hallertau Blanc	20 g	5 min	9.8 %
Whirlpool	Lomik	30 g	5 min	8.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
B16 Belgian Saison	Ale	Dry	10 g	Bulldog