

# Czerwone gacie

- Gravity **14.3 BLG**
- ABV ---
- IBU **40**
- SRM **14.9**
- Style **Red IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **28.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **28.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (70.2%)	81 %	4
Grain	Strzegom Pale Ale	1 kg (17.5%)	79 %	6
Grain	strzegom karmelowy bursztynowy	0.5 kg (8.8%)	70 %	70
Grain	Fawcett - Crystal Red	0.2 kg (3.5%)	70 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	25 g	60 min	11.2 %
Aroma (end of boil)	Amarillo	20 g	15 min	8.9 %
Aroma (end of boil)	Simcoe	10 g	10 min	11.4 %
Whirlpool	Pekko	30 g	0 min	13.6 %
Dry Hop	Pekko	30 g	5 day(s)	13.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	11.5 g	Fermentis
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### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	15 g	Boil	15 min