

# Czara Goryczy

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **49**
- SRM **6.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **19.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **19.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	3 kg (75%)	80 %	8
Grain	Monachijski	1 kg (25%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	25 g	50 min	10 %
Boil	Bramling	30 g	15 min	7.2 %
Aroma (end of boil)	Rakau (NZ)	20 g	0 min	8.7 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Finning	Mech Irlandzki	5 g	Boil	5 min