

# Hoppy Roggen 14 blg CTZ/Chinook

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **28**
- SRM **6.5**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.7 liter(s)**
- Total mash volume **27.9 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **21.7 liter(s)** of strike water to **47.4C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Rye Malt	3 kg (48.4%)	80 %	7
Grain	Viking Munich Malt	1 kg (16.1%)	78 %	18
Grain	Viking Vienna Malt	1 kg (16.1%)	79 %	7
Grain	Viking Pilsner malt	1 kg (16.1%)	82 %	4
Grain	Strzegom Karmel 30	0.2 kg (3.2%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus US	10 g	60 min	15.5 %
Boil	Chinook	20 g	15 min	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew WB-06	Wheat	Dry	12 g	FERMENTIS

## Extras

Type	Name	Amount	Use for	Time
Other	łuska ryżowa	150 g	Mash	110 min