

# Czarna Cholera

- Gravity **13.1 BLG**
- ABV ---
- IBU **28**
- SRM **38.7**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **16.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **75C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.5 kg (83.3%)	79 %	6
Grain	Jęczmień palony	0.25 kg (4.6%)	55 %	985
Grain	Strzegom pszenica prażona	0.25 kg (4.6%)	70 %	1000
Grain	Płatki jęczmienne	0.4 kg (7.4%)	75 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Boil	Lublin (Lubelski)	10 g	15 min	4 %
Boil	Lublin (Lubelski)	10 g	10 min	4 %
Boil	Lublin (Lubelski)	10 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale