

# Czarne ALE Cola

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **14**
- SRM **15.1**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **24.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **30.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **21.6 liter(s)**

## Steps

- Temp **72 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **79C**
- Add grains
- Keep mash **70 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **30.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.8 kg (68.4%)	80 %	4
Grain	Strzegom Pszeniczny	0.4 kg (7.2%)	81 %	6
Grain	Karmelowy Ciemny	0.4 kg (7.2%)	68 %	600
Sugar	Syrop Herbapol Cola (3 x 420ml)	0.958 kg (17.2%)	--- %	---

## Hops

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

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar