

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 |