

Beetroot

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **55**
- SRM **63.7**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **4.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1 kg (33.4%)	80 %	4
Grain	Wheat, Flaked	0.6 kg (20.1%)	77 %	4
Grain	Płatki owsiane	0.4 kg (13.4%)	85 %	3
Grain	Fawcett - Pale Chocolate	0.33 kg (11%)	71 %	600
Grain	Czekoladowy	0.33 kg (11%)	60 %	900
Grain	Weyermann - Pszeniczny Czekoladowy	0.16 kg (5.4%)	73 %	1001
Grain	Jęczmień palony	0.17 kg (5.7%)	55 %	1000

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	13.5 g	60 min	11.1 %
Boil	lunga	10 g	60 min	10 %