

Podwójna Czarna Lala

- Gravity **18.4 BLG**
- ABV ---
- IBU **92**
- SRM **37.2**
- Style **American 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 **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

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

Mash step by step

- Heat up **12 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (75%)	79 %	6
Grain	Strzegom Karmel 600	0.5 kg (12.5%)	68 %	601
Grain	Pszeniczny Crystal	0.5 kg (12.5%)	60 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Dr Rudi	20 g	60 min	11.8 %
Boil	Dr Rudi	30 g	15 min	11.8 %
Boil	Centennial	30 g	10 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	5 g	Mangrove Jack's