

# Eksperyment Profesora Czubali #1

- Gravity **12.9 BLG**
- ABV ---
- IBU **26**
- SRM **12.6**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.9 liter(s)**
- Total mash volume **10.5 liter(s)**

## Steps

- Temp **62 C**, Time **20 min**
- Temp **68 C**, Time **40 min**
- Temp **79 C**, Time **10 min**

## Mash step by step

- Heat up **7.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **68C**
- Keep mash **10 min** at **79C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **13.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	0.8 kg (30.5%)	80 %	4
Grain	Żytni	0.6 kg (22.9%)	85 %	8
Grain	Płatki pszeniczne	0.5 kg (19.1%)	85 %	3
Grain	Strzegom Pszeniczny	0.5 kg (19.1%)	81 %	6
Grain	wędzony torfem	0.15 kg (5.7%)	82 %	10
Grain	Black Barley (Roast Barley)	0.07 kg (2.7%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	15 g	10 min	4 %
Boil	Magnum	10 g	10 min	13.5 %
Boil	Columbus/Tomahawk/Zeus	10 g	10 min	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
S-33	Ale	Dry	5 g	Safale