

# Rachoń I

- Gravity **21.1 BLG**
- ABV **9.4 %**
- IBU **54**
- SRM **19.7**
- Style **Old Ale**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **29.8 liter(s)**

## Steps

- Temp **51 C**, Time **10 min**
- Temp **69 C**, Time **40 min**
- Temp **69 C**, Time **20 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **22.4 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **10 min** at **51C**
- Keep mash **20 min** at **69C**
- Keep mash **40 min** at **69C**
- Keep mash **10 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Caraaroma	0.18 kg (2.3%)	78 %	400
Grain	Strzegom Karmel 150	0.45 kg (5.7%)	75 %	150
Grain	Viking Pale Ale malt	4.5 kg (56.9%)	80 %	5
Grain	Strzegom Monachijski typ II	0.75 kg (9.5%)	79 %	22
Grain	Carafa II	0.075 kg (0.9%)	70 %	812
Grain	Strzegom Pilzneński	1.5 kg (19%)	80 %	4
Sugar	muscovado	0.45 kg (5.7%)	100 %	100

Dodany na ostatnie 5 minut gotowania brzezki.

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	50 g	60 min	13 %

Chmiel wrzucam po 10 minutach gotowania na 50 minut.

## Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Liquid	125 ml	Fermentum Mobile