

# Quadrupel

- Gravity **29.3 BLG**
- ABV **14.4 %**
- IBU **31**
- SRM **17**
- Style **Belgian Dark Strong Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **40 liter(s)**
- Total mash volume **56 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **15 min**
- Temp **74 C**, Time **30 min**

## Mash step by step

- Heat up **40 liter(s)** of strike water to **48.8C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **74C**
- Keep mash **15 min** at **78C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	3 kg (18.8%)	79 %	10
Grain	Strzegom Monachijski typ II	3 kg (18.8%)	79 %	22
Grain	Strzegom Bursztynowy	3 kg (18.8%)	70 %	49
Grain	Strzegom Pilzneński	6 kg (37.5%)	80 %	4
Grain	Strzegom Karmel 30	1 kg (6.3%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	100 g	60 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis Safbrew BE-256	Ale	Dry	11.5 g	Fermentis