

# Quadrupel

- Gravity **22.9 BLG**
- ABV **10.4 %**
- IBU **35**
- SRM **23.9**
- Style **Belgian Dark Strong Ale**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.6 liter(s)**
- Boil time **100 min**
- Evaporation rate **10 %/h**
- Boil size **25 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **25 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (58.8%)	81 %	4
Grain	Pilzneński 6-rzędowy	2 kg (23.5%)	80 %	5
Grain	Diastatyczny	0.5 kg (5.9%)	80 %	4
Grain	Special B	0.5 kg (5.9%)	70 %	290
Sugar	Cukier kandyzowany brązowy	0.5 kg (5.9%)	78.3 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	8.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM28 Habit opata	Ale	Liquid	60 ml	Fermentum Mobile