

# Quadrupel

- Gravity **21.6 BLG**
- ABV **9.7 %**
- IBU **18**
- SRM **19.4**
- Style **Belgian Dark Strong Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (62.5%)	80 %	4
Grain	Abbey Castle	0.5 kg (6.3%)	80 %	45
Grain	Special B Malt	0.5 kg (6.3%)	65.2 %	315
Grain	Strzegom Monachijski typ II	1 kg (12.5%)	79 %	22
Sugar	Candi Sugar, Clear	0.5 kg (6.3%)	78.3 %	2
Na 45 min				
Sugar	Candi Sugar, Amber	0.5 kg (6.3%)	78.3 %	148
Na 10 min				

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Green Bullet	20 g	50 min	12.2 %
Aroma (end of boil)	Green Bullet	30 g	0 min	12.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM26 Belgijskie Pagórki	Ale	Slant	300 ml	Fermentum Mobile
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