

# quad

- Gravity **22.9 BLG**
- ABV **10.4 %**
- IBU **27**
- SRM **14.9**
- Style **Belgian Dark Strong Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **1 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **31.7 liter(s)**

## Steps

- Temp **55 C**, Time **20 min**
- Temp **63 C**, Time **120 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **23.8 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **120 min** at **63C**
- Keep mash **15 min** at **76C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6.7 kg (72.6%)	81 %	4
Grain	Special B Malt	0.43 kg (4.7%)	65.2 %	315
Grain	Karmelowy Pszeniczny Strzegom	0.3 kg (3.3%)	79 %	130
Grain	Pszeniczny	0.5 kg (5.4%)	85 %	4
Sugar	cukierk kandyzowany 150 stopni	0.4 kg (4.3%)	100 %	50
Sugar	cukier kandyzowany 130 stopni	0.5 kg (5.4%)	--- %	---
Sugar	cukier kandyzowany 125 stopni	0.4 kg (4.3%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	58.4 g	60 min	3.65 %
Boil	East Kent Goldings	25 g	60 min	5.1 %
Boil	Saaz (Czech Republic)	40 g	25 min	2.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM27 Artefakty trapistów	Ale	Liquid	450 ml	Fermentum Mobile

## Notes

- odfermentowało z 22,3 do 3,0 a więc ponad 11% alko :)  
*May 5, 2019, 9:39 PM*