

# Brown chocolade

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **27**
- SRM **12.4**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Czekoladowy 400	0.25 kg (4.6%)	68 %	400
Grain	Chit Malt	0.06 kg (1.1%)	50 %	2
Grain	Strzegom Karmel 150	0.18 kg (3.3%)	75 %	150
Grain	Pilzneński	2 kg (36.4%)	81 %	3.8
Grain	BESTMALZ - Bestt Pale Ale	3 kg (54.6%)	80.5 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	celeia	33 g	70 min	5.3 %
Boil	Marynka	14 g	20 min	8.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	cukier	50 g	Mash	---
Other	łuska ryżowa	50 g	Mash	---
Fining	mech irlandzki	4 g	Boil	70 min