

# Słodziak - pomarańcze w czekoladzie

- Gravity **13.3 BLG**
- ABV ---
- IBU **18**
- SRM **28**
- Style **Foreign Extra Stout**

## 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 **68 C**, Time **90 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- 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	Viking Pale Ale malt	4 kg (72.7%)	80 %	5
Grain	Strzegom Karmel 300	1 kg (18.2%)	70 %	299
Grain	Strzegom Czekoladowy jasny	0.5 kg (9.1%)	68 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	10 g	60 min	9.5 %
Aroma (end of boil)	Amarillo	40 g	5 min	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	500 g	Boil	15 min
Flavor	Skórka słodkiej pomarańczy	50 g	Boil	10 min

Flavor	Skórka słodkiej pomarańczy	50 g	Secondary	14 day(s)
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