

# mikkpdswiatecale

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **28**
- SRM **30.1**
- Style **Christmas/Winter Specialty Spiced Beer**

## 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 **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **21.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **11.1 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 (56.3%)	80 %	5
Grain	Smoked Malt	2 kg (28.2%)	80 %	18
Grain	Jęczmień palony	0.2 kg (2.8%)	55 %	1200
Grain	Carafa	0.2 kg (2.8%)	70 %	800
Grain	Caraaroma	0.3 kg (4.2%)	78 %	400
Grain	Płatki owsiane	0.4 kg (5.6%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Aurora	30 g	50 min	8.5 %
Boil	Styrian Golding	45 g	10 min	3.6 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Spice	wędzone śliwki	1000 g	Boil	15 min