

# RIS

- Gravity **24.4 BLG**
- ABV **11.3 %**
- IBU **74**
- SRM **41.1**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **13 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **26 liter(s)**
- Total mash volume **36.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **26 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7 kg (67.3%)	80 %	5
Grain	Pilzneński	1 kg (9.6%)	81 %	4
Grain	Jęczmień palony	0.5 kg (4.8%)	55 %	985
Grain	karmelowy ciemny	0.5 kg (4.8%)	68 %	600
Grain	Pszeniczny	0.5 kg (4.8%)	85 %	4
Grain	Strzegom Czekoladowy jasny	0.2 kg (1.9%)	68 %	400
Grain	Płatki owsiane	0.5 kg (4.8%)	85 %	3
Grain	Płatki pszeniczne	0.2 kg (1.9%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	100 g	60 min	10 %
Aroma (end of boil)	East Kent Goldings	30 g	20 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	Fermentis