

Hamburger

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **55**
- SRM **4.4**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **2 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **64 C**, Time **60 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Viking	1.5 kg (33.3%)	80 %	5
Grain	Pszeniczny Viking	0.5 kg (11.1%)	85 %	4
Grain	Żytni Weyermann	2 kg (44.4%)	85 %	8
Grain	Płatki owsiane	0.5 kg (11.1%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	50 g	30 min	12.4 %
Dry Hop	EXP 2/20	50 g	3 day(s)	9.3 %
Dry Hop	EXP 3/20	50 g	3 day(s)	9.3 %
Dry Hop	Zula	50 g	3 day(s)	10.6 %
Dry Hop	Amora Preta	100 g	3 day(s)	9 %
Dry Hop	Zombie	100 g	3 day(s)	9.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP521 - Hornindal Kveik Ale	Ale	Slant	200 ml	---