

Sour

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **15**
- SRM **4.3**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **24.4 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (58.8%)	80 %	6
Grain	Słód owsiany Fawcett	1 kg (11.8%)	61 %	5
Grain	Płatki owsiane	0.7 kg (8.2%)	60 %	3
Adjunct	Pszenica niesłodowana	0.7 kg (8.2%)	75 %	3
Grain	Weyermann - Acidulated Malt	0.1 kg (1.2%)	80 %	6
Sugar	Milk Sugar (Lactose)	1 kg (11.8%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	El Dorado	100 g	5 min	11.1 %
Dry Hop	Mosaic	180 g	7 day(s)	11.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	pulpa malinowa	1000 g	Secondary	7 day(s)
Flavor	pulpa mango	1000 g	Secondary	7 day(s)
Flavor	moroszka	1000 g	Secondary	7 day(s)
Other	lactobacillus plantarum	40 g	Primary	2 day(s)