

15 SRM

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **47**
- SRM **15**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (35.2%)	81 %	4
Grain	Bestmalz Red X	1 kg (14.1%)	79 %	30
Grain	Viking Golden ale	1 kg (14.1%)	80 %	14
Grain	Viking Wędzony bukiem	1 kg (14.1%)	82 %	10
Grain	słód enzymatyczny Viking Malt	0.5 kg (7%)	--- %	7
Liquid Extract	Miód Gryczany (Buckwheat Honey)	1 kg (14.1%)	70 %	40
Grain	Jęczmień palony	0.095 kg (1.3%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Eureka!	30 g	30 min	18 %
Aroma (end of boil)	Wai-iti	25 g	20 min	4.1 %
Aroma (end of boil)	Wai-iti	25 g	60 min	4.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-33	Ale	Dry	11.5 g	Fermentis
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