

Kaskada

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **37**
- SRM **5.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (62.5%)	80 %	5
Grain	Viking Vienna Malt	1 kg (15.6%)	79 %	7
Grain	Viking Munich Malt	1 kg (15.6%)	78 %	18
Grain	Carabelge	0.2 kg (3.1%)	80 %	30
Grain	Pszeniczny	0.2 kg (3.1%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	25 g	60 min	6 %
Boil	Cascade	20 g	30 min	6 %
Boil	Cascade	15 g	20 min	6 %
Boil	Cascade	30 g	10 min	6 %
Boil	Cascade	20 g	5 min	6 %
Aroma (end of boil)	Cascade	35 g	0 min	6 %
Dry Hop	Cascade	40 g	7 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

US-05	Ale	Dry	11.5 g	---
-------	-----	-----	--------	-----