

# Graff

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **9**
- SRM **7**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **12.6 liter(s)**

## Steps

- Temp **69 C**, Time **70 min**

## Mash step by step

- Heat up **9.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **69C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.75 kg (49.9%)	80 %	5
Grain	Strzegom Wiedeński	0.26 kg (7.4%)	79 %	10
Grain	Abbey Castle	0.07 kg (2%)	80 %	45
Grain	Monachijski	0.73 kg (20.8%)	80 %	16
Dry Extract	WES ekstrakt słodowy jasny	0.29 kg (8.3%)	80 %	45
Adjunct	Pszenica niesłodowana	0.41 kg (11.7%)	75 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	10 g	60 min	5.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Kveik Oslo	Ale	Slant	250 ml	---

## Notes

- Warzenie 01.02.2023  
Gęstość początkowa ok. 15BLG. Sok również 15BLG.  
Zmieszano po 12.5l soku i brzezki.

Drożdże zadane w temp. 15°.  
*Feb 1, 2023, 1:11 PM*