

## #129a ctrl+F bez ekstraktu

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **35**
- SRM **4.7**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **6 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **24.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **25.4 liter(s)**

### Steps

- Temp **69 C**, Time **90 min**

### Mash step by step

- Heat up **19.1 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **90 min** at **69C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking pilzneński	2.1 kg (33.1%)	82 %	4
Grain	Viking pszeniczny	2.1 kg (33.1%)	83 %	5
Grain	Viking owsiany	1 kg (15.7%)	61 %	5
Grain	Vienna Malt	0.4 kg (6.3%)	78 %	8
Grain	Płatki owsiane	0.4 kg (6.3%)	60 %	3
Grain	Słód enzymatyczny	0.2 kg (3.1%)	80 %	5
Grain	Płatki pszeniczne	0.15 kg (2.4%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle PL 2018	50 g	60 min	5 %
Boil	Amarillo US 2020	10 g	20 min	8.7 %
Aroma (end of boil)	Mosaic US 2019	10 g	10 min	12.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP066 - London Fog	Ale	Slant	100 ml	White Labs