

# Fresh and Sour 50

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **18**
- SRM **2.7**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **53.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **64.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **21.9 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **35 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **48.7 liter(s)** of **76C** water or to achieve **64.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (55.2%)	80 %	5
Grain	Żytni	1.5 kg (20.7%)	85 %	8
Grain	Pszoniczny	0.75 kg (10.3%)	85 %	4
Sugar	Milk Sugar (Lactose)	1 kg (13.8%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	15 g	60 min	9.5 %
Boil	Centennial	20 g	10 min	9.5 %
Aroma (end of boil)	Citra	25 g	5 min	13.5 %
Aroma (end of boil)	Centennial	37.5 g	5 min	9.5 %
Aroma (end of boil)	Citra	50 g	0 min	13.5 %
Aroma (end of boil)	Centennial	50 g	0 min	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	26.25 g	Fermentis

## Notes

- Kwas mlekowy do uzyskania PH 3,8  
*Apr 5, 2018, 12:58 PM*