

# lekkie sesyjne ale żytnie żapa

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **33**
- SRM **4.8**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.7 liter(s)**
- Boil time **80 min**
- Evaporation rate **8 %/h**
- Boil size **31.1 liter(s)**

## Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **45 C**, Time **10 min**
- Temp **62 C**, Time **15 min**
- Temp **70 C**, Time **30 min**
- Temp **79 C**, Time **10 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **15 min** at **62C**
- Keep mash **30 min** at **70C**
- Keep mash **10 min** at **79C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (36.4%)	80 %	5
Grain	Żytni	1 kg (18.2%)	85 %	8
Grain	Strzegom Karmel 30	0.5 kg (9.1%)	75 %	30
Grain	Pszeniczny	1 kg (18.2%)	85 %	4
Grain	Cara-Pils/Dextrine	1 kg (18.2%)	72 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Southern Cross	25 g	30 min	14 %
Aroma (end of boil)	Lomik	50 g	10 min	4.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale K-97	Ale	Dry	12 g	Fermentis

## Notes

- Miało być 9,5blg wyszło 11,5 - wysoka wydajność zacierania.

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

woda miękka, korekta do pH 6  
zacieranie - woda 17L 50C wrzut, grzać do 62 przerwa, 70C dekstryna, 78 mashout  
filtracja jednocześnie fałszywe dno i oplót - zawrócić męty.  
wysładzanie 3 etapowe - woda 3x9L 72C  
chłodzenie fermentor w garze  
napowietrzanie - przelew 4 razy, ostatni z drożdżami  
*May 4, 2020, 5:04 PM*