

# ameryka zboża

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **37**
- SRM **3.5**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.3 liter(s)**
- Total mash volume **11 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **70 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **8.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **70C**
- Keep mash **1 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.1 kg (40%)	80 %	5
Grain	Pszeniczny	0.75 kg (27.3%)	85 %	4
Grain	Rice, Flaked	0.4 kg (14.5%)	70 %	2
Grain	Płatki owsiane	0.5 kg (18.2%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10 g	15 min	14.2 %
Boil	Simcoe	10 g	15 min	12.1 %
Boil	Mosaic	10 g	15 min	11.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Flavor	skórka pomarańczy suszona	50 g	Boil	15 min
Flavor	trawa cytrynoa	10 g	Boil	15 min
Flavor	skórka cytryny suszona	10 g	Boil	15 min
Flavor	kolendra	5 g	Boil	15 min

## Notes

- Skórka pójdzie na ostatnią minute gotowanie i potem 15 min  
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