

# Rozpęd

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- Gravity **11.4 BLG**
- ABV ---
- IBU **47**
- SRM **4.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **24.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3.3 kg (80.5%)	81 %	6
Grain	Oats, Flaked	0.8 kg (19.5%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Motueka	50 g	15 min	7 %
Boil	Pacifica (NZ)	20 g	15 min	4.8 %
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %