

# Sprzątanie magazynu na polskich chmielach

---

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **46**
- SRM **5.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **75C**
- Sparge using **7.1 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (85.7%)	80 %	5
Grain	Viking Carabody malt	0.3 kg (8.6%)	75 %	8
Grain	Karmelowy Jasny 30EBC	0.2 kg (5.7%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	12.4 %
Whirlpool	Zula	20 g	1 min	13 %