

# Amarykańskie chmiele

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **25**
- SRM **4.7**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **50 C**, Time **20 min**
- Temp **65 C**, Time **60 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **60 min** at **65C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (86.2%)	80 %	4
Grain	Monachijski	0.5 kg (8.6%)	80 %	16
Grain	Strzegom Karmel 30	0.3 kg (5.2%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	10 g	60 min	18.5 %
Boil	Warrior	5 g	30 min	15.5 %
Boil	Cascade	30 g	3 min	5.6 %