

# Cascade SMaSH

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **37**
- SRM **3.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **13.3 liter(s)**

## Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.8 liter(s)**
- Total mash volume **10.4 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**

## Mash step by step

- Heat up **7.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **13.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.35 kg (90.4%)	81 %	4
Grain	Płatki owsiane	0.25 kg (9.6%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	14.3 %
Boil	Cascade	10 g	20 min	5.5 %
Boil	Cascade	10 g	1 min	5.5 %
Dry Hop	Cascade	40 g	7 day(s)	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	5 g	Fermetis