

# EXPF-3/20 SMASH

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **35**
- SRM **3.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

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

## Mash step by step

- Heat up **19.3 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5.5 kg (100%)	82 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	EXPF-3/20	50 g	30 min	7 %
Boil	EXPF-3/20	50 g	5 min	7 %
Boil	EXPF-3/20	50 g	1 min	7 %
Dry Hop	EXPF-3/20	50 g	2 day(s)	7 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips Piwowarski	4 g	Mash	60 min
Water Agent	Sól Epsom	1 g	Mash	60 min