

# SMOKED APA #66

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **31**
- SRM **5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.5 liter(s)**
- Boil time **80 min**
- Evaporation rate **16 %/h**
- Boil size **25.6 liter(s)**

## Mash information

- Mash efficiency **82.2 %**
- Liquor-to-grist ratio **4.77 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **24.2 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **68.6C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **25.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking - pale ale	2.2 kg (52.4%)	79 %	6
Grain	Viking - wędzony dębem	2 kg (47.6%)	81 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook PL	15 g	60 min	8.6 %
Aroma (end of boil)	Styrian Golding	50 g	15 min	4 %
Aroma (end of boil)	Cascade PL	30 g	5 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	120 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	2 g	Mash	---

Water Agent	kwas mlekowy [ml]	5.08 g	Mash	---
Water Agent	chlorek wapnia [ml]	3.44 g	Mash	---
Fining	mech irlandzki	3 g	Boil	5 min
Water Agent	epsom	2 g	Mash	---