

# apa puławski

---

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **26**
- SRM **3.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6 kg (100%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	20 g	60 min	8.9 %
Boil	Puławski	20 g	20 min	8.9 %
Aroma (end of boil)	Puławski	20 g	5 min	8.9 %
Whirlpool	Puławski	20 g	0 min	8.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Slant	200 ml	FM