

# Na wakacje

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **21**
- SRM **5.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

## Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **65 C**, Time **55 min**
- Temp **73 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16 liter(s)** of strike water to **72C**
- Add grains
- Keep mash **55 min** at **65C**
- Keep mash **10 min** at **73C**
- Keep mash **5 min** at **78C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (80%)	79 %	6
Grain	Strzegom Wiedeński	0.5 kg (10%)	79 %	10
Grain	cookie	0.25 kg (5%)	75 %	50
Grain	Weyermann - Carapils	0.25 kg (5%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	5 g	60 min	12.4 %
Whirlpool	Galaxy	30 g	10 min	15 %
Whirlpool	citra	30 g	10 min	12.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM21 Odkrycie sezonu	Ale	Liquid	150 ml	Fermentum Mobile