

## nowe

- Gravity **8.8 BLG**
- ABV ---
- IBU **64**
- SRM **3.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

### Steps

- Temp **65 C**, Time **70 min**
- Temp **75 C**, Time **2 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **2 min** at **75C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (60.6%)	81 %	4
Grain	Pszeniczny	1 kg (30.3%)	85 %	4
Adjunct	płatki ryżowe	0.3 kg (9.1%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	15 g	60 min	13 %
Boil	Palisade	15 g	20 min	8.5 %
Boil	pilgrim	15 g	20 min	10.1 %
Boil	Palisade	10 g	10 min	8.5 %
Boil	pilgrim	10 g	10 min	10.1 %
Boil	Strisselspalt	15 g	5 min	3.2 %
Boil	saphir	25 g	5 min	2.6 %
Boil	pilgrim	20 g	0 min	10.1 %
Dry Hop	Palisade	10 g	5 day(s)	7.5 %
Dry Hop	saphir	25 g	5 day(s)	2.6 %
Dry Hop	pilgrim	15 g	5 day(s)	10.1 %
Boil	skórka z cytryny	10 g	5 min	1 %

Boil	skórka z pomarańczy	20 g	5 min	1 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Slant	300 ml	Danstar

### Extras

Type	Name	Amount	Use for	Time
Flavor	moszcz z pomarańczy	550 g	Primary	---
Flavor	moszcz z cytryny	200 g	Primary	---