Ostatnie Uderzenie #2

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **40**
- SRM **9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.3 liter(s)**

Steps

- Temp **69 C**, Time **70 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **8.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **69C**
- Keep mash **15 min** at **78C**
- Sparge using **23.2 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	1 kg *(21.3%)*	79 %	10
Grain	Pszeniczny	0.5 kg *(10.6%)*	85 %	4
Grain	Carared	0.5 kg *(10.6%)*	75 %	39
Grain	Pilzneński	0.5 kg *(10.6%)*	81 %	4
Liquid Extract	Gozdawa ekstrakt słodowy jasny	1.7 kg *(36.2%)*	80 %	45
Sugar	Milk Sugar (Lactose)	0.5 kg *(10.6%)*	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Opal	10 g	60 min	8.5 %
Boil	Hersbrucker	15 g	30 min	3 %
Boil	Perle	15 g	30 min	7 %
Aroma (end of boil)	Cascade	30 g	10 min	6 %
Aroma (end of boil)	Amarillo	20 g	10 min	9.5 %
Aroma (end of boil)	Mosaic	20 g	5 min	10 %
Aroma (end of boil)	Simcoe	20 g	5 min	13.2 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis