

Duża Panderoza

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **28**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **170 liter(s)**
- Trub loss **5 %**
- Size with trub loss **178.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **215.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **136.5 liter(s)**
- Total mash volume **182 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **136.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **124.1 liter(s)** of **76C** water or to achieve **215.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	24 kg (52.7%)	80 %	4
Grain	Strzegom Pszeniczny	10 kg (22%)	81 %	6
Grain	Viking Pale Ale malt	8 kg (17.6%)	80 %	5
Grain	BESTMALZ - Best Pilsen	3 kg (6.6%)	80.5 %	4
Grain	Acid Malt	0.5 kg (1.1%)	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	100 g	60 min	11 %
Boil	Amora Preta	50 g	10 min	11 %
Boil	Marynka	100 g	60 min	10 %
Dry Hop	Chinook	100 g	3 day(s)	13 %
Dry Hop	Cascade	100 g	3 day(s)	6 %
Dry Hop	Centennial	100 g	3 day(s)	10.5 %
Dry Hop	Ahtanum	50 g	3 day(s)	5 %
Dry Hop	Talus	50 g	3 day(s)	7.4 %
Dry Hop	Galaxy	50 g	3 day(s)	17 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis