Apacz

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **44**
- SRM **43.3**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **5 %**
- Size with trub loss **30.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **35 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4.85 kg *(52.4%)*	80 %	7
Grain	Brown Malt (British Chocolate)	1.2 kg *(13%)*	70 %	128
Grain	Castle Cafe	1.2 kg *(13%)*	75.5 %	480
Grain	Strzegom Karmel 150	1 kg *(10.8%)*	75 %	150
Grain	Fawcett - Pszeniczny Czekoladowy	0.5 kg *(5.4%)*	73 %	1001
Liquid Extract	WES ekstrakt słodowy jasny	0.5 kg *(5.4%)*	80 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Magnum	35 g	60 min	13.5 %
Boil	Galaxy	30 g	5 min	15 %
Boil	Centennial	20 g	5 min	10.1 %
Whirlpool	Galaxy	40 g	0 min	15 %
Whirlpool	Centennial	30 g	0 min	10.1 %

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