american porter

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **47**
- SRM **27.3**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.1 liter(s)**
- Total mash volume **31 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Golden Promise	5 kg *(72.5%)*	81 %	4
Grain	Brown Malt (British Chocolate)	1 kg *(14.5%)*	70 %	128
Grain	crystal 160 ebc	0.3 kg *(4.3%)*	78 %	160
Grain	Special B Castle	0.2 kg *(2.9%)*	70 %	350
Grain	Strzegom Czekoladowy jasny	0.2 kg *(2.9%)*	68 %	400
Grain	Fawcett - Pszeniczny Czekoladowy	0.1 kg *(1.4%)*	73 %	1001
Grain	Jęczmień palony	0.1 kg *(1.4%)*	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Aroma (end of boil)	Simcoe	15 g	10 min	13.2 %
Aroma (end of boil)	Cascade	15 g	10 min	6 %
Aroma (end of boil)	East Kent Goldings	20 g	10 min	5.1 %
Dry Hop	East Kent Goldings	50 g	1 day(s)	5.1 %