

CASCADE APA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **60**
- SRM **16.7**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **13.7 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	2.5 kg (76.9%)	80.5 %	4
Grain	Karmelowy żytni Strzegom	0.5 kg (15.4%)	75 %	150
Grain	Bestmalz Carmel Pils	0.1 kg (3.1%)	75 %	5
Grain	Strzegom Karmel 600	0.05 kg (1.5%)	68 %	601
Grain	Melanoiden Malt	0.1 kg (3.1%)	80 %	39

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Enigma (AUS)	5 g	20 min	17.2 %
Boil	Galaxy	5 g	20 min	15 %
Boil	Enigma (AUS)	5 g	10 min	17.2 %
Boil	Galaxy	5 g	10 min	15 %
Boil	Enigma (AUS)	20 g	0 min	17.2 %
Boil	Galaxy	20 g	0 min	15 %

Yeasts

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