IPA #4

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **63**
- SRM **9.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **550 liter(s)**
- Trub loss **5 %**
- Size with trub loss **583 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **622.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **440 liter(s)**
- Total mash volume **577.5 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **440 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **1 min** at **78C**
- Sparge using **320.2 liter(s)** of **76C** water or to achieve **622.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	100 kg *(72.7%)*	80 %	4
Grain	CHÂTEAU MUNICH LIGHT	25 kg *(18.2%)*	80 %	15
Grain	Château Crystal	12.5 kg *(9.1%)*	74 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	El Dorado	500 g	60 min	15 %
Boil	Amarillo	300 g	30 min	9.5 %
Boil	El Dorado	500 g	5 min	15 %
Whirlpool	Strata	1000 g	10 min	13.6 %
Whirlpool	Cascade	1000 g	10 min	6 %
Whirlpool	Amarillo	1000 g	10 min	9.5 %

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