

# Milord EPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **43**
- SRM **15.8**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **30.7 liter(s)**

## Steps

- Temp **67 C**, Time **80 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **23.5 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (77.1%)	80 %	6
Grain	Karmelowy Czerwony	0.5 kg (7%)	75 %	50
Grain	Monachijski	0.5 kg (7%)	80 %	16
Grain	Carared	0.25 kg (3.5%)	75 %	39
Grain	Caramel/Crystal Malt - 30L	0.25 kg (3.5%)	75 %	59
Grain	Jęczmień palony	0.13 kg (1.8%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	60 min	13.5 %
Boil	Fuggles	50 g	5 min	4.5 %
Boil	East Kent Goldings	50 g	5 min	6.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM704	Ale	Slant	200 ml	Fermentum Mobile