

## Mars (Red IPA)

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- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **62**
- SRM **17.7**
- Style **Red IPA**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.75 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **28.3 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **20.8 liter(s)** of strike water to **73.2C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **0 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Słód Pale Ale	4.7 kg (62.3%)	79 %	6
Grain	Strzegom Wiedeński	1.3 kg (17.2%)	79 %	10
Grain	Weyermann Caramunich 3	0.5 kg (6.6%)	76 %	150
Grain	Viking melanoidynowy	0.5 kg (6.6%)	75 %	60
Grain	Słód żytni	0.5 kg (6.6%)	70 %	180
Grain	Jęczmień palony	0.05 kg (0.7%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum - DE	15 g	60 min	11.5 %
Boil	Magnum - DE	15 g	45 min	11.5 %
Boil	Magnum - DE	25 g	30 min	11.5 %
Boil	Magnum - DE	30 g	10 min	11.5 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	20 g	2 min	15.5 %
Aroma (end of boil)	Amarillo - USA	20 g	2 min	9.5 %
Dry Hop	Amarillo - USA	80 g	3 day(s)	9.5 %

Dry Hop	Columbus/Tomahawk/Zeus	80 g	3 day(s)	15.5 %
Dry Hop	Mosaic	50 g	3 day(s)	11 %

## Yeasts

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