

# czarny rycerz

- Gravity **25.5 BLG**
- ABV **12 %**
- IBU **23**
- SRM **80**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **29.1 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	3 kg (30.9%)	75 %	4
Grain	Strzegom Pale Ale	4 kg (41.2%)	70 %	6
Grain	Strzegom Karmel 600	0.5 kg (5.2%)	63 %	601
Grain	Strzegom Czekoladowy 1200	0.5 kg (5.2%)	63 %	1202
Grain	Fawcett - Pszeniczny Czekoladowy	0.5 kg (5.2%)	70 %	1001
Grain	Jęczmień palony	0.5 kg (5.2%)	50 %	985
Grain	Monachijski	0.5 kg (5.2%)	75 %	16
Grain	Płatki owsiane	0.2 kg (2.1%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	lunga	20 g	10 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's -M15 Empire Ale	Ale	Dry	22.2 g	Mangrove Jack's

## Notes

- Możliwe użycie drożdży M15 z poprzednio uwarzonej warki whisky ALE 12blg  
*Apr 25, 2018, 8:06 AM*