

# Imperial stout

- Gravity **32 BLG**
- ABV **16.3 %**
- IBU **44**
- SRM **55.6**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33.9 liter(s)**
- Total mash volume **45.2 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **33.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **0.5 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (2 Row) Ger	5.5 kg (43%)	81 %	4
Grain	Special B Malt	1 kg (7.8%)	65.2 %	315
Grain	Pszeniczny	1 kg (7.8%)	85 %	4
Grain	Rye Malt	0.7 kg (5.5%)	63 %	10
Grain	Strzegom Karmel 150	0.5 kg (3.9%)	75 %	150
Grain	Płatki owsiane	0.5 kg (3.9%)	85 %	3
Grain	Strzegom Czekoladowy jasny	0.7 kg (5.5%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.5 kg (3.9%)	68 %	400
Grain	Weyermann - Carafa II	0.4 kg (3.1%)	70 %	837
Sugar	Maple Syrup	0.5 kg (3.9%)	65.2 %	69
Grain	Rye, Flaked	0.5 kg (3.9%)	78.3 %	4
Sugar	Milk Sugar (Lactose)	1 kg (7.8%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	70 min	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Liquid	250 ml	Fermentum Mobile

## Notes

- Double mash (1: 3kg pils, 1kg pszenica, 0.7kg żytni, 0.5kg płatki owsiane, 0.5kg czekoladowy jasny)  
+ 8g chlorek wapnia  
+ 8g kreda  
+ biszkopty  
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