

# 90 SHILLING SCOTCH ALE

- Gravity **18.2 BLG**
- ABV ---
- IBU **20**
- SRM **11.9**
- Style **Strong Scotch Ale**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **0 %**
- Size with trub loss **19 liter(s)**
- Boil time **120 min**
- Evaporation rate **5 %/h**
- Boil size **20.9 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.2 liter(s)**
- Total mash volume **28.3 liter(s)**

## Steps

- Temp **67 C**, Time **75 min**

## Mash step by step

- Heat up **21.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **75 min** at **67C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **20.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7 kg (99%)	80 %	5
Grain	Jęczmień palony	0.07 kg (1%)	55 %	1150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	iunga	15 g	50 min	12.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	200 ml	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	płatki	100 g	Secondary	30 day(s)

## Notes

- 4 litry brzeczki przedniej gotujemy osobno i intensywnie przez 30 min w celu karmelizacji  
*Feb 17, 2017, 1:07 PM*