

# STRONG SCOTCH ALE 21

- Gravity **22.2 BLG**
- ABV ---
- IBU **50**
- SRM **16.6**
- Style **Strong Scotch Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **68 C**, Time **80 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **0 min** at **78C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **19.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	3 kg (46.9%)	79 %	16
Grain	Strzegom Wiedeński	0.8 kg (12.5%)	79 %	10
Grain	Whisky light	2 kg (31.3%)	85 %	4
Grain	Jęczmień palony	0.1 kg (1.6%)	55 %	985
Grain	caramunich	0.5 kg (7.8%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Phoenix	20 g	60 min	11 %
Boil	Phoenix	20 g	30 min	11 %
Boil	Phoenix	20 g	10 min	11 %
Dry Hop	Phoenix	40 g	4 day(s)	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	10 g	Danstar