

Sunderland

- Gravity **11.4 BLG**
- ABV ---
- IBU **25**
- SRM **20.8**
- Style **Northern English Brown Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **17.8 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3.4 kg (86.1%)	81 %	6
Grain	Brown Malt (British Chocolate)	0.2 kg (5.1%)	70 %	128
Grain	Chocolate Malt (UK)	0.15 kg (3.8%)	73 %	887
Grain	Caramel/Crystal Malt - 10L	0.2 kg (5.1%)	75 %	20

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Progress	30 g	60 min	5.5 %
Boil	Golding	5 g	15 min	5 %
Boil	Golding	5 g	10 min	5 %
Boil	Golding	5 g	5 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M03 UK Dark Ale	Ale	Dry	10 g	Mangrove Jack's