

Extra Strong Bitter

- Gravity **13.1 BLG**
- ABV ---
- IBU **39**
- SRM **10.8**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (94.3%) | 80 % | 5 |
| Grain | Strzegom Karmel 300 | 0.3 kg (5.7%) | 70 % | 300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | Challenger | 20 g | 60 min | 7.4 % |
| Boil | Challenger | 5 g | 30 min | 7.4 % |
| Boil | Fuggles | 10 g | 30 min | 5.9 % |
| Boil | Challenger | 10 g | 15 min | 7.4 % |
| Boil | Fuggles | 10 g | 15 min | 5.9 % |
| Boil | Fuggles | 10 g | 5 min | 5.9 % |
| Boil | East Kent Goldings | 10 g | 5 min | 5.8 % |
| Aroma (end of boil) | Fuggles | 10 g | 5 min | 5.9 % |
| Aroma (end of boil) | East Kent Goldings | 15 g | 5 min | 5.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------------------------|-----|-----|------|-----|
| Danstar - London ESB | Ale | Dry | 11 g | --- |
|-------------------------|-----|-----|------|-----|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 5 g | Boil | 15 min |