

Penny Dreadful (Best Bitter)

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **29**
- SRM **18.2**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Słód Pale Ale | 2.3 kg (50%) | 80 % | 8 |
| Grain | Słód Mild | 1 kg (21.7%) | 80 % | 8 |
| Grain | Biscuit Malt | 0.5 kg (10.9%) | 79 % | 45 |
| Grain | Słód karmelowy | 0.3 kg (6.5%) | 80 % | 150 |
| Grain | Słód prażony | 0.3 kg (6.5%) | 80 % | 600 |
| Grain | Słód pszeniczny Bestmalz | 0.2 kg (4.3%) | 82 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 20 g | 60 min | 5.1 % |
| Boil | East Kent Goldings | 20 g | 30 min | 5.1 % |
| Boil | East Kent Goldings | 20 g | 15 min | 5.1 % |
| Boil | East Kent Goldings | 20 g | 5 min | 5.1 % |
| Whirlpool | East Kent Goldings | 20 g | 0 min | 5.1 % |

Yeasts

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

| | | | | |
|----------------------|-----|-----|------|---------|
| Danstar - Nottingham | Ale | Dry | 11 g | Danstar |
|----------------------|-----|-----|------|---------|