Southern promise

- Gravity 13.1 BLG
- ABV 5.3 %
- IBU **39**
- SRM **4.2**
- Style American IPA

Batch size

- Expected quantity of finished beer 21 liter(s)
- Trub loss 5 %
- Size with trub loss 23.1 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 27.7 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 16.9 liter(s)
- Total mash volume 22.6 liter(s)

Steps

- Temp **63 C**, Time **15 min** Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up 16.9 liter(s) of strike water to 70.2C
- Add grains
- Keep mash 15 min at 63C
- Keep mash 45 min at 72C
- Keep mash 10 min at 76C
- Sparge using 16.4 liter(s) of 76C water or to achieve 27.7 liter(s) of wort

Fermentables

| Туре | Name | Amount | Yield | EBC |
|-------|----------------------------------|-----------------------|-------|-----|
| Grain | Słód pszeniczny Bestmalz | 0.09 kg <i>(1.6%)</i> | 82 % | 5 |
| Grain | Słód pilzneński Castlemalting | 2.5 kg <i>(44.3%)</i> | 81 % | 3.5 |
| Grain | Thomas Fawcett Pale Cara | 0.5 kg (8.9%) | 80 % | 9 |
| Grain | Thomas Fawcett Golden Promise | 2.5 kg <i>(44.3%)</i> | 81 % | 4 |
| Grain | Thomas Fawcett Pale Crystal | 0.05 kg <i>(0.9%)</i> | 81 % | 90 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------------------|--------|--------|------------|
| Boil | Southern Passion - RPA | 20 g | 60 min | 11.7 % |
| Boil | Southern Passion - RPA | 20 g | 15 min | 11.7 % |
| Boil | Southern Passion - RPA | 20 g | 5 min | 11.7 % |
| Aroma (end of boil) | Southern Passion - RPA | 20 g | 0 min | 11.7 % |

| | Dry Hop | Southern Passion - RPA | 20 g | 3 day(s) | 11.7 % |
|--|---------|---------------------------|------|----------|--------|
|--|---------|---------------------------|------|----------|--------|

Yeasts

| Name | Туре | Form | Amount | Laboratory |
|--------------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 10 g | Mangrove Jack's |

Extras

| Туре | Name | Amount | Use for | Time |
|--------|------------|--------|---------|--------|
| Fining | Irish Moss | 5 g | Boil | 15 min |