

STABILITY

| | |
|-------------------------|---|
| Customer: | Creightons |
| Product: | Argan Silk Hair Oil |
| R&D Code: | MCR19398*1 |
| Start Date: | 29/06/2023 |
| Packaging Material: | Jar |
| Submitted by (Lab Tech) | Lorenzo |
| Chemist | Lorenzo |
| Folder path | S:\R & D\Product Stability\Stability Test Reports\Creightons\2023 |

| Test parameter | Specification | Initial (RT) | 12 Weeks (RT) |
|--------------------------------|------------------------|--------------|---------------|
| Appearance | clear liquid | AS STANDARD | AS STANDARD |
| Colour | colourless | AS STANDARD | AS STANDARD |
| Odour & Level (Fragrance ref.) | RFCR0086 @ 0.5% | AS STANDARD | AS STANDARD |
| pH | N/A | N/A | N/A |
| Viscosity | 50-400 | 100 | 50 |
| Spindle | SP3@10 | | |

Tests Required

| | | | |
|------|------|------|------|
| 4°C | 25°C | 30°C | 40°C |
| 50°C | D/L | S/L | L/B |

D/L = Daylight

S/L = Store Light – for products in transparent packaging which will be backlit in store

L/B = Light Box – for products in transparent packaging which are coloured and will be exposed to light on shelf

Comments: Not tested at 40 and 50°C due to low flash point. Some odour change and haziness in sunlight. Product to be stored in opaque packaging.

Proposed Packaging:

| Week | Date | Tested By | Checked By | Comments |
|------|------------|-----------|------------|----------|
| 2 | 13/07/2023 | EC | LB | |
| 4 | 27/07/2023 | EC | LB | |
| 8 | 24/08/2023 | EC | LB | |
| 12 | 21/09/2023 | EC | LB | |
| 24 | 28/12/2023 | | | |

| | | | |
|-------------|--------------|-------------|----------|
| Decision: | Approved by: | Signed: | Date: |
| PASS | MB | M Bullimore | 15.10.23 |

2 weeks





12 weeks



| | | | |
|-----------------|---------------------|--------------|------------|
| Product: | Argan Silk Hair Oil | Code: | MCR19398*1 |
|-----------------|---------------------|--------------|------------|

| | | | | | | |
|--------------|------------|-----|------|------|------|------|
| | colourless | | | | | |
| Weeks | Daylight | 4°C | 25°C | 30°C | 40°C | 50°C |
| 2 | 0 | 0 | 0 | 0 | | |
| 4 | 1Y* | 0 | 0 | 0 | | |
| 8 | 0/1Y* | 0 | 0 | 0 | | |
| 12 | 0/1Y* | 0 | 0 | 0 | | |
| 24 | | | | | | |

*slight haziness

| | | | | | | |
|--------------|-----------------------|-----|------|------|------|------|
| | ODOUR RFCR0086 @ 0.5% | | | | | |
| Weeks | Daylight | 4°C | 25°C | 30°C | 40°C | 50°C |
| 2 | 0 | 0 | 0 | 0 | | |
| 4 | 2 | 0 | 0 | 0 | | |
| 8 | 3 | 0 | 0 | 0 | | |
| 12 | 3 | 0 | 0 | 0 | | |
| 24 | | | | | | |

*off-odour

| | | | | | | |
|--------------|----------|-----|------|------|------|------|
| | pH N/A | | | | | |
| Weeks | Daylight | 4°C | 25°C | 30°C | 40°C | 50°C |
| 2 | | | | | | |
| 4 | | | | | | |
| 8 | | | | | | |
| 12 | | | | | | |
| 24 | | | | | | |

| | | | | | | |
|--------------|-----------|-----|-----------|--------|------|------|
| | VISCOSITY | | 100 - 400 | SP3@10 | | |
| Weeks | Daylight | 4°C | 25°C | 30°C | 40°C | 50°C |
| 2 | 50 | 50 | 50 | 50 | | |
| 4 | 50 | 50 | 50 | 50 | | |
| 8 | 50 | 50 | 50 | 50 | | |
| 12 | 50 | 50 | 50 | 50 | | |
| 24 | | | | | | |

| | | | | | |
|------------------------|----------------------------|-------------------|---------------|------------------|--------------|
| Key | | Colour Key | | Odour Key | |
| 0 = No Change | 3 = Noticeable Change | F = Faded | R = More Red | A = Acceptable | W = Weaker |
| 1 = Very Slight Change | 4 = Very Noticeable Change | D = Darkened | B = More Blue | U = Unacceptable | S = Stronger |
| 2 = Slight Change | 5 = Extreme Change | Y = More Yellow | | | |

| | | |
|-------------------|------|------|
| Light Box: | PASS | FAIL |
|-------------------|------|------|

| | | | | |
|-------------------|---------|---------|---------|----------|
| Store Ligh | 2 weeks | 4 weeks | 8 weeks | 12 weeks |
| Comment: | | | | |

| | | | |
|-----------------------|-----|------|----------|
| Emulsion Check | | | |
| Weeks | 4°C | 40°C | Comments |
| 4 | | | |
| 8 | | | |
| 12 | | | |