

Iscaguard FAC

| | | | | |
|--------------|-------------------|-------------------|-------------------|---------|
| Paraben Free | Thiazolinone Free | Formaldehyde Free | Preservative Free | Natural |
| ✓ | ✓ | ✓ | ✓ | ✓ |

| INCI declaration |
|---|
| aqua, lactic acid, malic acid, propanediol, citric acid, glycolic acid, ascorbic acid, tartaric acid, gluconic acid |

Iscaguard FAC is an aqueous blend of naturally occurring fruit acids, suitable for preserving both rinse-off and leave-on products. It has a broad spectrum of activity and is effective against bacteria, yeast, mould and fungi. The preservative also contains naturally sourced, GMO free Propanediol which provides improved skin moisturisation characteristics, in addition to boosting the efficacy of the preservative. Iscaguard FAC is therefore the perfect choice of preservative for skin friendly formulations.

| In Use Concentrations | ISCA recommendation | EU Cosmetic Regulation (max) |
|-----------------------|---------------------|------------------------------|
| Leave-on | 0.3 – 0.8 % | Not regulated (Annex V) |
| Rinse-off | 0.3 – 0.8 % | Not regulated (Annex V) |

In use concentrations vary according to the formulation type and other ingredients present. The correct use dosage should be determined by microbial challenge testing of the finished formulation (ISCA UK offers discounted challenge testing to our customers).

Recommended Applications

| Shampoo, Shower gel (Rinse-off) | Creams, lotions (Leave-on) | O/W emulsions | W/O emulsions | Wet wipes | Eye care | Lip Care | Oral care | Children under 3 |
|---------------------------------|----------------------------|---------------|---------------|-----------|----------|----------|-----------|------------------|
| • | • | • | • | • | • | • | • | • |

Use scenarios derived from evaluation of Cosmetic Regulation guidelines and preservative performance for typical formulations.

| Formulation guidelines | |
|-----------------------------|---|
| pH (effective range) | 2.0 – 6.5 |
| Solubility (Water) | Fully soluble |
| Solubility (Glycols) | Fully soluble |
| Maximum Process Temperature | 80 °C (avoid prolonged periods at high temperature) |
| General information | Iscaguard FAC is compatible with most personal care ingredients. It is suitable for use in formulations with acidic pH values, but will lose efficacy as the pH approaches 7.0. |

| Minimum Inhibitory Concentrations | |
|-----------------------------------|---------|
| Microorganism | MIC (%) |
| Bacteria (gram-negative) | |
| Pseudomonas aeruginosa | 0.075 |
| Escherichia coli | 0.1 |
| Salmonella typhimurium | 0.2 |
| Bacteria (gram-positive) | |
| Staphylococcus aureus | 0.075 |
| MRSA | 0.2 |

| Minimum Inhibitory Concentrations | |
|-----------------------------------|---------|
| Microorganism | MIC (%) |
| Yeasts | |
| Candida albicans | 0.3 |
| Moulds | |
| Aspergillus niger | 0.2 |
| Penicillium funiculosum | 0.05 |


| Physical Properties (approximate) | |
|-----------------------------------|------------------------------|
| Appearance | Clear to light yellow liquid |
| Odour | Mild acidic odour |
| Density | 1.18 gcm ⁻³ |
| pH value | < 2.0 |

| Physical Properties (approximate) | |
|-----------------------------------|---------------|
| Solubility in water | Fully soluble |
| Solubility in glycols | Fully soluble |
| VOC content | 0 % |

Safety information

| Cosmetic Regulation labelling requirements |
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| No special labelling requirements. |

| Transport information | |
|-------------------------|---------------------|
| | IMDG |
| UN number | - |
| UN proper shipping name | Not dangerous goods |
| Transport hazard class | - |
| Packing group | - |
| Environmental hazards | - |

| Hazard classification/labelling | |
|---------------------------------|---|
| Hazard pictograms |  |
| Signal word | Danger |
| Hazard statements | H315 Causes skin irritation. H318 Causes serious eye damage. |