Technical specifications

**Energen 78000**

**PROPERTIES**
Energizer for men, revitalizing, tonifying, anti-imperfections

**ACTIVE MOLECULES**
- Saponosides
- Galactomannan

**APPEARANCE**
Viscous liquid
- Pale-brown colored

**SOLUBILITY**
Water soluble

**RECOMMENDED DOSE**
2% - 5%

---

Formulation

**Energen gel**

**INCI / PCPC** | % (w/w)
---|---
A | Aqua (Water)
- Decylm ESTA 0.10
- ENERGEN™ 5.00
- Glycerin 3.00
- Caprylyl Glycol 0.30

B | Alcohol Denat.
- BHT 0.05
- Phenoxethanol 0.50
- Menthyl Lactate 0.20

C | Macadamia Oil 2.00

D | Parfum (Fragrance) 0.30

E | Polyacrylate-13, Polyisobutane, Polysiloxane 2.50

---

Cosmetic applications

Modern man with an intensive lifestyle, traditionally not used to care and treatment products and used to aggressive routines such as daily shaving, often shows the signs of tired skin. To recover a healthy and attractive appearance we developed Energen™, a natural active ingredient that meets men’s cosmetic needs.

- **Basic daily use** (after shave, facial moisturizer, bath gel)
- **Energizing treatment** (energizing / nourishing face cream, tired hands moisturizer, sport products)
- **Spa-energy recovery** (home spa, spa centres)

---

Toxicological information

Energen™ has been tested according to available toxicological information, based on safety assays and bibliographical data. These data support the conclusion that the use of Energen™ under normal cosmetic use conditions and at the recommended concentrations is safe for consumers.
Energen™ combines the Himalayan strength with the Andean resistance to revitalize men’s skin and to enhance its energy capacity in a “Yang invigorating like effect”.

Energen™ tonifies the skin, smoothes its imperfections and increases its hydration level, thus restoring a radiant and healthy look.

Characteristics and benefits

Energen™ is based on active saponoids from Sapindus mukorossi (SMAS), injected into a three-dimensional matrix of galactomannan from Caesalpinia spinosa, for a sequential delivery into skin.

- Energizer: SMAS increase ATP production, thus enhancing the energy and functional capacity of skin cells.
- Tonifying: fibroblasts regenerate the dermal extracellular matrix, especially collagen, thus improving skin tone.
- Skin relief rejuvenating: by enhancing the energy and functions of dermis and epidermis, imperfections and surface alterations are reduced, to obtain a smoother skin relief.
- Moisturizing: because of its high molecular weight, galactomannan cannot penetrate into the skin but remains on the surface, thus acting as a filmogenic agent that prevents water loss and increases skin hydration level.
- Revitalizing: these benefits as a whole, result in visual enhancement of the skin appearance and gives a radiant healthy look.

In Vivo

Male volunteers showing the signs of tired skin: a group used a formulation containing 5% Energen™ and a second group used placebo. Volunteers in both groups applied the formulations twice a day, for 28 days. The following parameters were evaluated: skin tone, imperfections, hydration level.

- Efficacy profile (%)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Placebo</th>
<th>Energen 0.1%</th>
<th>Energen 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tone</td>
<td>-15</td>
<td>-12</td>
<td>-13</td>
</tr>
<tr>
<td>Imperfections</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>Hydration</td>
<td>-9</td>
<td>-6</td>
<td>-5</td>
</tr>
</tbody>
</table>

Energen™ stimulates fibroblast ATP production in a concentration-dependent way.

In Vivo

SMAS

In vitro

- Effects on cell ATP production

Fibroblast culture treated with Energen™ for 24 hours.

<table>
<thead>
<tr>
<th>Concentration</th>
<th>ATP Production (%) vs control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energen 0.1%</td>
<td>15.5</td>
</tr>
<tr>
<td>Energen 1%</td>
<td>21.8</td>
</tr>
</tbody>
</table>

Energen™ stimulates fibroblast ATP production in a concentration-dependent way.

In Vivo

- Perceived efficacy (self-evaluation)

<table>
<thead>
<tr>
<th>Self-evaluation</th>
<th>Placebo</th>
<th>Energen 0.1%</th>
<th>Energen 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthier</td>
<td>-12</td>
<td>-13</td>
<td>-5</td>
</tr>
<tr>
<td>More radiant</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>More moisturized</td>
<td>-10</td>
<td>-9</td>
<td>-8</td>
</tr>
<tr>
<td>Revitalized</td>
<td>-6</td>
<td>-5</td>
<td>-4</td>
</tr>
</tbody>
</table>