

Sodium DNA

Description

Sodium DNA (PDRN) is a highly purified deoxyribonucleic acid polymer obtained from salmon semen through a rigorous purification process, known for its exceptional safety and stability. Polydeoxyribonucleotide (PDRN) is a class of naturally derived DNA fragments, consisting of chains between 50 and 2000 base pairs, and is widely recognized for its ability to repair and regenerate skin tissue.

This advanced ingredient provides multiple benefits for skin health: it binds to the adenosine A2A receptor, activating signaling pathways that increase anti-inflammatory factors, reduce inflammatory mediators, and calm irritation. At the same time, Sodium DNA promotes fibroblast proliferation, stimulates collagen synthesis, and enhances the secretion of key growth factors such as EGF, FGF, and IGF - essential for repairing and rebuilding the skin's structure.

Additionally, it boosts VEGF expression, supporting the formation of new capillaries, improving nutrient delivery, and aiding in the removal of aging by-products. Sodium DNA also helps brighten the complexion by inhibiting melanin production through downregulation of melanin-related genes and tyrosinase activity. Through the remedial pathway, it provides purines and pyrimidines that accelerate DNA synthesis and speed up skin regeneration.

Thanks to these comprehensive mechanisms, Sodium DNA is an ideal ingredient for anti-aging and repair formulations, helping restore, protect, and revitalize the skin for a youthful, healthy appearance.

Efficacy

- reduces inflammations
- acts soothing
- promotes cell regeneration
- stimulates growth factor
- reduces acne scars
- brightens skin
- increases collagen synthesis
- improves microcirculation

Appearance

white to slight yellow powder

INCI

Sodium DNA

Registration

CAS-No.....-/-
EC-No.....-/-



Nature needs no cosmetics,
but cosmetics need nature

Sodium DNA

Preservatives / Stabilizers

none

Characteristics

loss on drying.....<= 20 %
assay.....>= 90 %
pH (1 %).....5 – 9
molecular weight.....<=1000 kDa

Application

daily cosmetics
creams and lotions
face mask
toner
serum

Application concentration

0.01 - 3 %

Incorporation

Sodium DNA (PDRN) is slightly soluble in water and should be added during the post-production stage.

Toxicology

non hazardous in normal use concentration

Storage & Shelf life

store in original sealed containers at temperature between 10 - 25 °C at a dry and light protected place.

In closed original containers the shelf life is 24 months.