

## PCA

**Update date:**

Friday, 30 May, 2014

**Status:**

Uncompleted

**CAS number:**

98-79-3  
28874-51-3

**Alternative nomenclature:**

2-Pyrrolidone-5-carboxylic acid

**Substances with same NOAEL:**

Sodium PCA

**Extract:**

No

**Annex number:**

No Annexes

**Missing tests:**

Carcinogenicity  
Teratogenicity  
Reproductive toxicity

**CHEMO-PHYSICAL PROPERTIES:****INCI name:**

Sodium PCA

**Log P:**

-2.39

**Molecular weight:**

151.00 da

## TOXICOLOGICAL PROFILE OF THE SUBSTANCE:

### NOAEL:

4000.00 mg/kg \* bw/d

### Test duration:

180 d

### Test type:

Chronic

### Animal model:

rat

### Route of administration:

oral

### Source:

Scientific journal

- [International Journal of Toxicology](#)

1999 18: 25

### Notes:

The substance wasn't irritant to the eyes neither to the skin, when tested at concentration up to 50%. No evidence of phototoxicity, sensitisation or comedogenicity was found. Genotoxicity tests gave negative results.

A NOAEL equal to 1,5% PCA (corresponding to 750 mg/kg \* bw/d) was obtained from a single-dose study that lasted less than 28 days. The NOAEL here reported was chosen because it was obtained from a subchronic study on the same animal (rat) which employed a range of doses.

The substance must not be used in cosmetic products containing nitrosating agents.