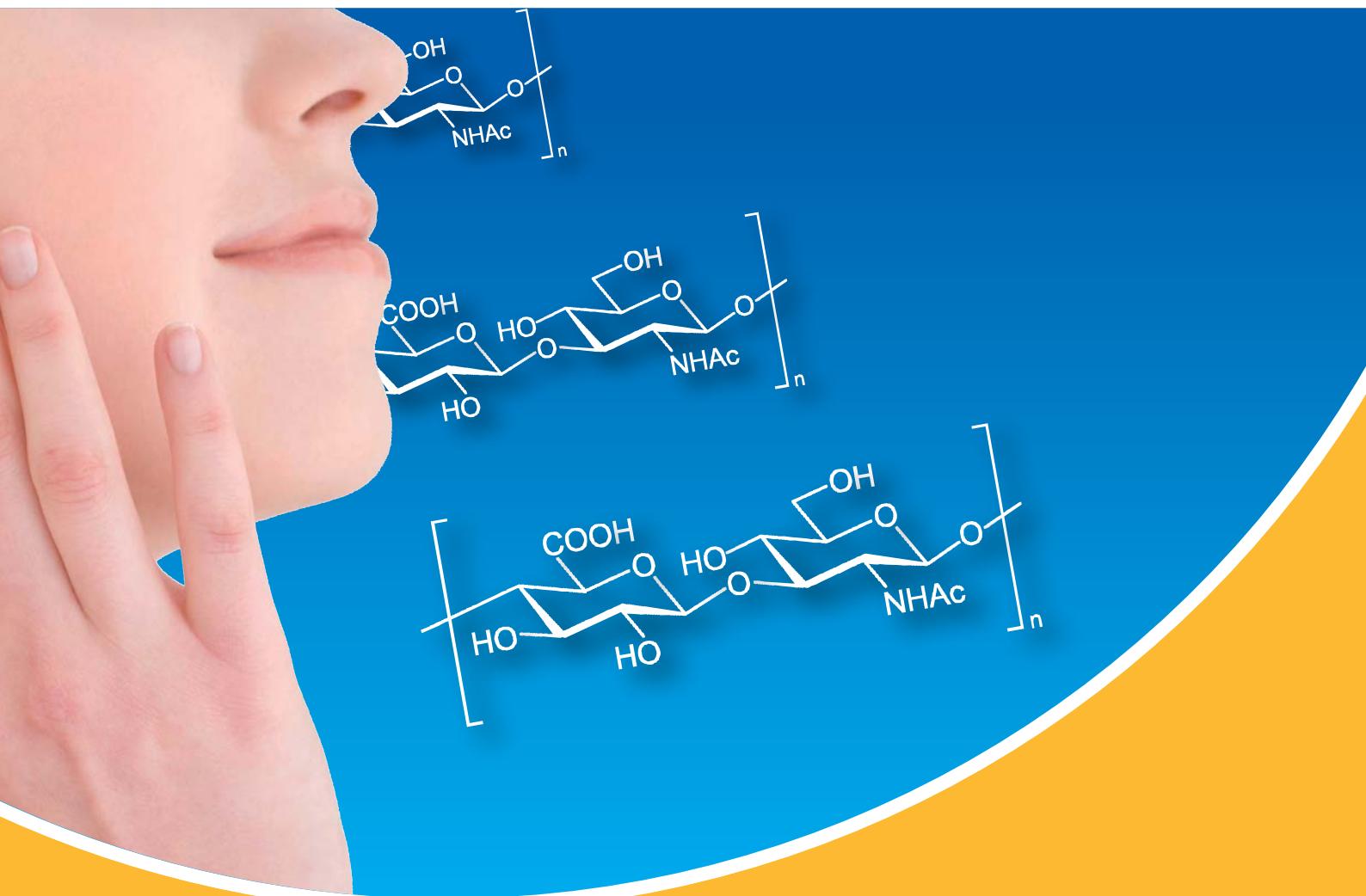


# Cosmetic Research Chemicals



Skin Moisturizers

Skin-Whitening Ingredients

Hair Dyeing

UV-absorber

Others

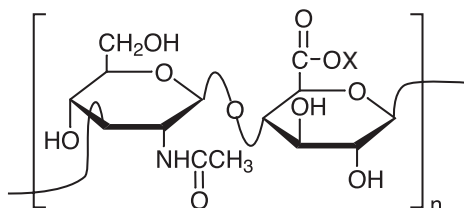
# Cosmetic Research Chemicals

In the never ending search to improve and retain their youthful appearance, more and more people are turning to cosmetic applications for their skin. In an effort to keep their skin healthy, as well as cover up blemishes and wrinkles, more

people are seeking cosmetic products which contain moisturizers, whitening agents, and sunscreens. Below are listed some products available from us for cosmetic research purposes.

## Skin Moisturizers

### Hyaluronic Acid



This product is extracted from cockscomb, followed by separation and purification, and then freeze-dried to give the final pure product. It is widely used in various cosmetics as a moisturizer, since it hydrates the skin due to its high water-holding capacity.

**Hyaluronic Acid from Cockscomb** (CAS RN: 9004-61-9) [H0595]

**Hyaluronic Acid Sodium Salt from Cockscomb**  
(CAS RN: 9067-32-7) [H0603]

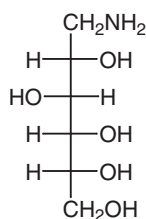
**Hyaluronic Acid Potassium Salt from Cockscomb**  
(CAS RN: 31799-91-4) [H0652]

### Chondroitin Sulfate Sodium Salt

(CAS RN: 9082-07-9) [C0335]

Chondroitin Sulfate Sodium Salt, one of the mucopolysaccharides, is known to exist extensively within the connective tissues of the skin and cartilage of living organisms. It is believed that the content of chondroitin within the skin decreases with age. It is blended into cosmetic products as a moisturizer.

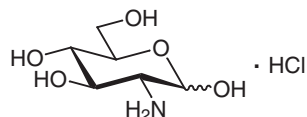
### D-Glucamine



(CAS RN: 488-43-7) [G0252]

D-Glucamine has smoothing and moisturizing effects on the skin. It is blended into many cosmetic products.

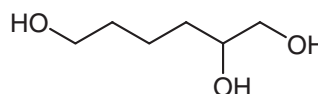
### D-(+)-Glucosamine Hydrochloride



(CAS RN: 66-84-2) [G0044]

D-(+)-Glucosamine is a natural amino sugar, which forms chitin and chitosan, that is extracted from crustacea such as crabs and prawns. It is also one of the main components of cartilage cells. Glucosamine soothes and alleviates dry skin, makes the application of make-up products smoother, and increases the moisture level of the skin.

### Alkanetriols



**1,2,6-Hexanetriol** (CAS RN: 106-69-4) [H0104]

1,2,6-Hexanetriol is blended into cosmetic products as a moisturizer.

**1,2,3-Butanetriol** (CAS RN: 4435-50-1) [B0918]

**1,2,4-Butanetriol** (CAS RN: 3068-00-6) [B0687]

**1,2,5-Pentanetriol** (CAS RN: 14697-46-2) [P1350]

**1,2,7-Heptanetriol** (CAS RN: 37939-50-7) [H0957]

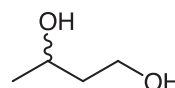
**1,2,8-Octanetriol** (CAS RN: 382631-43-8) [O0279]

**1,2,9-Nonanetriol** (CAS RN: 382631-42-7) [N0652]

**1,2,10-Decanetriol** (CAS RN: 91717-85-0) [D2721]

**3-Methylpentane-1,3,5-triol** (CAS RN: 7564-64-9) [T0894]

### Alkanediols



**1,3-Butanediol** (CAS RN: 107-88-0) [B0679]

**(R)-(-)-1,3-Butanediol** (CAS RN: 6290-03-5) [B1159]

**(S)-(+)-1,3-Butanediol** (CAS RN: 24621-61-2) [B1160]

Butanediol is blended into cosmetic products as a moisturizer.

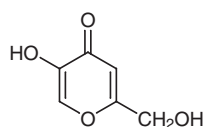
**(R)-(-)-1,2-Propanediol** (CAS RN: 4254-14-2) [P1152]

**(S)-(+)-1,2-Propanediol** (CAS RN: 4254-15-3) [P1129]

<b>1,3-Propanediol</b>	(CAS RN: 504-63-2) [P0486]	<b>1,7-Heptanediol</b>	(CAS RN: 629-30-1) [H0028]
<b>1,2-Butanediol</b>	(CAS RN: 584-03-2) [B0804]	<b>1,2-Octanediol</b>	(CAS RN: 1117-86-8) [O0277]
<b>1,4-Butanediol</b>	(CAS RN: 110-63-4) [B0680]	<b>1,8-Octanediol</b>	(CAS RN: 629-41-4) [O0024]
<b>2,3-Butanediol</b> (mixture of stereoisomers)	(CAS RN: 513-85-9) [B0681]	<b>(3R,6R)-3,6-Octanediol</b>	(CAS RN: 129619-37-0) [O0293]
<b>(R,R)-(-)-2,3-Butanediol</b>	(CAS RN: 24347-58-8) [B1161]	<b>1,2-Nonanediol</b>	(CAS RN: 42789-13-9) [N0651]
<b>(S,S)-(+)-2,3-Butanediol</b>	(CAS RN: 19132-06-0) [B1343]	<b>1,9-Nonanediol</b>	(CAS RN: 3937-56-2) [N0287]
<b>1,2-Pentanediol</b>	(CAS RN: 5343-92-0) [P1178]	<b>1,2-Decanediol</b>	(CAS RN: 1119-86-4) [D2720]
<b>1,5-Pentanediol</b>	(CAS RN: 111-29-5) [P0050]	<b>1,10-Decanediol</b>	(CAS RN: 112-47-0) [D0014]
<b>(2R,4R)-(-)-2,4-Pentanediol</b>	(CAS RN: 42075-32-1) [P1411]	<b>1,2-Dodecanediol</b>	(CAS RN: 1119-87-5) [D1861]
<b>(2S,4S)-(+)-2,4-Pentanediol</b>	(CAS RN: 72345-23-4) [P1412]	<b>1,12-Dodecanediol</b>	(CAS RN: 5675-51-4) [D0969]
<b>1,2-Hexanediol</b>	(CAS RN: 6920-22-5) [H0688]	<b>threo-5,6-Dodecanediol</b>	(CAS RN: 70859-33-5) [D2678]
<b>1,6-Hexanediol</b>	(CAS RN: 629-11-8) [H0099]	<b>erythro-5,6-Dodecanediol</b>	(CAS RN: 70859-32-4) [D2719]
<b>2,5-Hexanediol</b>	(CAS RN: 2935-44-6) [H0100]	<b>1,2-Tetradecanediol</b>	(CAS RN: 21129-09-9) [T1353]
<b>(2R,5R)-2,5-Hexanediol</b>	(CAS RN: 17299-07-9) [H1032]	<b>1,2-Hexadecanediol</b>	(CAS RN: 6920-24-7) [H0993]
<b>(2S,5S)-2,5-Hexanediol</b>	(CAS RN: 34338-96-0) [H0969]	<b>1,16-Hexadecanediol</b>	(CAS RN: 7735-42-4) [H0552]
<b>1,2-Heptanediol</b>	(CAS RN: 3710-31-4) [H0948]		

## Skin-Whitening Ingredients

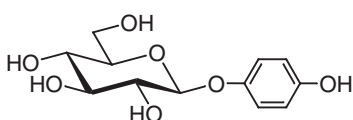
### Kojic Acid



(CAS RN: 501-30-4) [K0010]

Kojic Acid has become known for its anti-bacterial properties and whitening effects due to its retardation of melanism. Since it also inhibits enzymes which deteriorate foodstuffs, it is being employed not only as a compounding agent in cosmetics, but also as a deterioration inhibitor for foodstuffs, especially in the prevention of the discoloration of a crab.

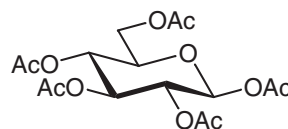
### Arbutin



(CAS RN: 497-76-7) [A0522]

It is reported that arbutin inhibits the activity of tyrosinase, which is a key enzyme for melanin biosynthesis. This acts to effectively prevent the anomalous increase of melanin which is blamed for "age or sun spots and freckles."

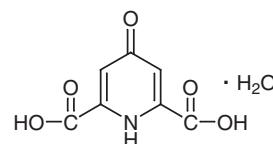
### Penta-O-acetyl-β-D-glucopyranose



(CAS RN: 604-69-3) [P0028]

Glycosides whose glycosyl donor is Pentaacetyl-β-D-glucose are utilized in whitening cosmetics, fragrances, etc.

### Chelidamic Acid Monohydrate

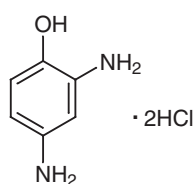


(CAS RN: 138-60-3) [C0821]

Chelidamic Acid is attracting attention as a pharmaceutical intermediate and as well as a cosmetic material due to its anti-inflammatory and whitening properties.

## Hair Dyeing

### Amidol

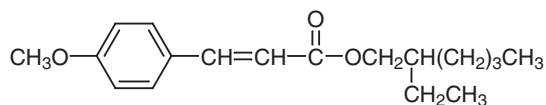


(CAS RN: 137-09-7) [D0080]

Amidol, used as a photo-developing reagent, is also used as a component of hair-dyeing products.

## UV-absorber

## 2-Ethylhexyl 4-Methoxycinnamate



(CAS RN: 5466-77-3) [M1082]

2-Ethylhexyl 4-Methoxycinnamate is frequently blended into cosmetic products as a sunscreen.

## Others

 $\omega$ -Aminoalkanols

<b>2-Aminoethanol</b>	(CAS RN: 141-43-5) [A0297]
<b>2-Aminoethanol Hydrochloride</b>	(CAS RN: 2002-24-6) [A0298]
<b>3-Amino-1-propanol</b>	(CAS RN: 156-87-6) [A0438]
<b>3-Amino-1-propanol Hydrochloride</b>	(CAS RN: 14302-46-6) [A0407]

<b>5-Amino-1-pentanol</b>	(CAS RN: 2508-29-4) [A0875]
<b>4-Amino-1-butanol</b>	(CAS RN: 13325-10-5) [A1013]
<b>6-Amino-1-hexanol</b>	(CAS RN: 4048-33-3) [A1027]
<b>8-Amino-1-octanol</b>	(CAS RN: 19008-71-0) [A1522]
<b>10-Amino-1-decanol</b>	(CAS RN: 23160-46-5) [A1523]
<b>12-Amino-1-dodecanol</b>	(CAS RN: 67107-87-3) [A1524]

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