

THE SCIENTIFIC COMMITTEE ON COSMETIC PRODUCTS AND NON-FOOD PRODUCTS
INTENDED FOR CONSUMERS

OPINION

ON

**THE 1ST UPDATE OF THE
INVENTORY OF INGREDIENTS EMPLOYED
IN COSMETIC PRODUCTS (SECTION I)**

Adopted by the SCCNFP during the 13th plenary session
of 28 June 2000

1. Preamble

Article 5a of the Cosmetics Directive 76/768/EEC stipulates that “the Commission shall compile an inventory of ingredients employed in cosmetic products ...shall publish the inventory and shall update it periodically”. Accordingly Commission Decision 96/335/EEC of 8 May 1996 established the inventory and a common nomenclature of ingredients employed in cosmetic products.

Furthermore the Cosmetics Directive specifies in the same Article 5a that the inventory is compiled “on the basis in particular of information supplied by the industry concerned”, and in its Article 8 that the SCCNFP must be consulted prior to any amendments to the current inventory.

The task of the SCCNFP was elucidated by a mandate issued by the responsible service of the European Commission (SCCNFP XXIV/1891/98) which indicates that the SCCNFP shall act as a resource of scientific expertise to the European Commission, in terms of advising on the :

1. Medical and professional expectations and requirements of the Inventory.
2. Scientific accuracy and validity of proposed entries.
3. Outstanding needs of the existing text/proposed improvements in subsequent updates.

In order to fulfil its work, scientifically based, the SCCNFP met experts from European Industry and worked in collaboration with the JRC (Joint Research Centre) of the Commission.

The SCCNFP wishes to acknowledge in particular the co-operation of COLIPA (European Cosmetic, Toiletry and Perfumery Association) and its scientific experts in establishing the 1st Update of Section I of the Inventory.

The present document includes the opinion of the SCCNFP on the 1st Update of the Inventory of ingredients employed in cosmetic products (Section I) and, in Annex, the Update of the Inventory (Section I) as adopted by the SCCNFP.

2. Status report on the Inventory

During the 11th Plenary Session of the SCCNFP (17 February 1999) a Status Report on the Inventory was adopted (SCCNFP/0098/99).

In this document, the following six priorities that must be incorporated into the 1st update of the Inventory were listed :

1. To accomplish the principle: each INCI (International Nomenclature Cosmetic Ingredient) name should refer to only one specific ingredient.
2. To correct the INCI names of Ethylhexyl derivatives and to adopt a final decision about Amphoderivatives.
3. To identify botanical entries with more transparency, particularly with the use of the Linné nomenclature instead of English names (when appropriate). The generic sentence used for Chemical/IUPAC name in the case of botanical entries must be changed using a more specific statement for each botanical entry indicating: part of the plant used, type of

extract, main chemical components and, if appropriate, specific components of potential concern.

4. To solve problems on chemical identification associated to polymers.
5. To solve the problem of hair dyes/cosmetic colorants concerning C.I. identification and restrictions.
6. To improve the functions of the ingredient. Examples : Additive, Biological additive, Oral care.

3. Amendments to Section I of the Inventory

Technical discussions with COLIPA representatives and JRC allowed to reach a global agreement on the amendments to be included in the 1st Update of the inventory (Section I) in order to answer the concern of the SCCNFP about the scientific accuracy and validity of some existing and new entries, and to improve the botanical entries as well as the definitions and classes of functions

The agreement concerned the following items :

1. The solution of problems on double entries detected about Amino acids, Colouring agents and Botanicals according to the principle “One INCI name for one ingredient”;
2. The inclusion of the corrections proposed by JRC on Nomenclature problems detected on existing entries (from letters A to C) and on new entries; also, the consideration of anomalous INCI names in respect of chemical names;
3. The solution of many problems related to botanicals identification and, in particular, the replacement in all entries of the generic sentence “Extractive and their physically modified derivatives such as tinctures, concretes, absolutes, essential oils, oleoresins, terpenes, terpene-free fractions, distillates, residues etc obtained from ...” by using more specific statements. Nevertheless, other problems remain unsolved (see below);
4. The modification of the INCI names containing the stem name “Oct” by using the nomenclature “Ethylhexyl”;
5. The enlargement of the list of ingredient functions and the refinement of their definitions.

However it was recognised that a complete review of existing ingredients (presently realised up to letter C) would need a reasonable time and will be continuously prepared.

After review it was considered that the modifications made in co-operation with COLIPA and the JRC conformed to the points agreed.

Opinion on : 1st update of Section I of the inventory of ingredients employed in cosmetics

Since the publication of the EU Inventory of Cosmetic Ingredients in June 1996, the following additions/corrections/deletions were made :

Item	Number of amendments	Comment
INCI Name	New: 1466 Changed: 843	New INCI names; changes made according to new botanicals nomenclature and to the replacement of "octyl-" derivatives with "ethylhexyl-"
INN Name	6	
EP Name	28	
CAS No.	391	
EINECS/ELINCS No.	124	
Chem/IUPAC Name	1584	All chemical names of botanicals were amended: missing names for other ingredients were added
Restrictions	138	Updated according to the adaptations to technical progress of the Cosmetics Directive (up to the 25 th)
Functions	3499	Introduction of 30 new functions, replacement of 500 "botanicals", 95 "biological additives" and of 307 "additives" with more specific functions
Deleted ingredients	143	Due to presence on Annex II of the Cosmetics Directive, or to consolidation of multiple entries
JRC ingredients	1461	
Ingredient function definitions		30 New function definitions introduced, several modified
Nomenclature Conventions		Substantially revised to make them clearer and/or to adapt them to the changes in nomenclature
Total	9683	

4. Opinion of the SCCNFP

The SCCNFP is of the opinion that this 1st Revision and Update of Section I of the Inventory of ingredients employed in cosmetic products has usefully improved the Inventory. There are nearly 10,000 improvements to the original edition of Section I, including 1466 new and 843 modified INCI names. This revised Section I can to a greater extent fulfil the expectations of consumers related to transparency and thus serving health protection.

As the Inventory of Cosmetic Ingredients is an evolving document, the SCCNFP proposes the following provisions agreed by the interested parties for the next updating of Section I of the Inventory :

1. To revise periodically nomenclature problems associated to existing entries and future new entries.
2. To propose more accurate INCI names for amino acids.
3. To solve the question of the nomenclature of hair dyes/colouring agents (DG Enterprise).
4. To improve the information given for botanical entries, considering in particular the following aspects :
 - Specificity of entries. Genus and species as themselves cannot be considered as an INCI name (plant material in general).
 - Volatile and fixed oils
 - Species vs Variety of subspecies
 - Problems detected on CAS numbers and EINECS/ELINCS numbers
 - List of synonyms
 - Checking of warnings, restrictions or banning of some entries with a clear toxicological concern.
5. To solve the real situation for Dialkanolamines (DG Enterprise).
6. To adopt a final decision about cyclic and acyclic Amphoderivatives.
7. Polymers.
8. Fermentation products obtained from biotechnology.
9. To solve the problems of peculiar INCI entries such as Algae, Bioflavonoids, etc.

A revision of Section II of the Inventory, related to perfume and aromatic raw materials, has been made with tabulation of the ingredients by alphabetical order instead of EINECS number including also the corresponding restrictions. This 1st Update of Section II will be presented to the Plenary of 24th October 2000 for final adoption.

ANNEX : 1st Update of Section I of the inventory of ingredients employed in cosmetic products
 Nomenclature conventions
 List of ingredient functions

The Annex is part of the opinion.

ANNEX : NOMENCLATURE CONVENTIONS

The conventions used for establishing INCI names are as follows :

1. In order to facilitate use and clarity, INCI names have been designed to require a minimum of punctuation and capitalisation.
2. Wherever new nomenclature has been adopted, every effort has been made to use the shortest name consistent with these rules.
3. Simple chemical names are used wherever possible.
4. Recognised chemical abbreviations are used where applicable. A list of the abbreviations used in the Inventory may be found on page 684.
5. Traditional stems are retained as combining forms when consistent with other systems (see rule 17).
6. Abbreviations are utilised for simplifying the nomenclature of families of complex ingredients when applicable (see abbreviation list on page 684).
7. Compounds that are related or are similar to materials described in recognised sources are named, whenever possible, by analogy to the listed names.
8. Singly substituted derivatives do not usually include the prefix 'mono'. This term is used only when required to prevent ambiguity. The absence of a suitable prefix implies 'mono', e.g. Glyceril stearate.
9. The term 'Glyceride' has been utilized to describe a monoglyceride. Mixtures of mono-, di- and triglycerides are referred to as 'Glycerides'. Triglycerides are assigned specific nomenclature, e.g. Tristearin.
10. Multiple substitution is routinely described with the appropriate prefix such as 'di-', 'tri-' or 'tetra-', e.g. Glyceryl distearate.
11. Names of ingredients, other than colours, that contain terminal numbers are generally hyphenated. Derivatives of hyphenated materials retain the original hyphen, e.g. Laureth-3, Laureth-3 phosphate.
12. Hydration states are usually expressed.
13. Straight-chain alkyl groups are described by their common stem names (see rule 17).
14. Materials containing mixtures of even-carbon chain length fractions are named by the appropriate, commonly used fatty stem term, e.g. Cetearyl alcohol (C16 and C18).

Materials containing mixtures of even- and odd-carbon chain length fractions are designated by alternative nomenclature, e.g. C12-15 alcohols (C12, C13, C14 and C15).

15. Branched-chain alkyl groups are usually described by the prefix ‘iso’ followed by the common stem name for the comparable straight-chain group (e.g. Isostearyl alcohol, Isocetyl alcohol) – see also rule 17. The major exception to this rule is the nomenclature for the 2-alkyl of Guerbet alcohols. These are named by standard chemical rules (e.g. Ethylhexanol, Octyldodecanol, Decyltetradecanol). Derivatives are named accordingly (e.g. Ethylhexyl myristate, Cetyl ethylhexanoate, Diethylhexylamine, Triethylhexanoin, Butyloctanoic acid).
16. The following table has been included to clarify the nomenclature for derivatives of caproic, caprylic and capric acids.

<i>Chain length</i>	<i>Stem name</i>	<i>Acid</i>	<i>Ester</i>
C6	Capro	Caproic	Caproate
C8	Capryl	Caprylic	Caprylate
C10	Capr	Capric	Caprate

<i>Chain length</i>	<i>Acyl</i>	<i>Alkyl</i>	<i>Ampho</i>
C6	Caprooyl	Caproyl	Caproo
C8	Capryloyl	Caprylyl	Caprylo
C10	Caproyl	Capryl	Capro

17. The following table describes the nomenclature applied to straight-chain acids and alcohols. Branched-chain acids and alcohols utilize the names listed in this table preceded by the term ‘iso’ (e.g. Isosteraric acid). Guerbet alcohols, however, are designated by specific names (e.g. Octyldodecanol). (See also rule 15).

Saturated :

	<i>Acid</i>	<i>Alcohol</i>
C6	Caproic	Hexyl
C7	Heptanoic	Heptyl
C8	Caprylic	Carpylyl
C9	Pelargonic	Nonyl
C10	Capric	Decyl
C11	Undecanoic	Undecyl
C12	Lauric	Lauryl
C13	Tridecanoic	Tridecyl
C14	Myristic	Myristil
C15	Pentadecanoic	Pentadecyl
C16	Palmitic	Cetyl
C17	Margaric	Heptadecyl
C18	Stearic	Stearyl

C20	Arachidic	Arachidyl
C22	Behenic	Behenyl
Unsaturated :		
C11	Undecylenic	Undecylenyl
C16	Palmitoleic	Palmitoeyl
C18	Oleic	Oleyl
C18	Linoleic	Linoleyl
C18	Linolenic	Linolenyl
C20	Arachidonic	Arachidonyl
C22	Cetoleic	Cetoleyl
C22	Erucic	Erucyl

18. The nomenclature for ingredients consisting of mixtures of similar materials (e.g. fatty acids, fatty alcohols) is determined on the basis of the chemical identity of the raw material as purchased. Mixtures that reflect the original distribution of components due to their natural source (e.g. coconut) are named utilizing the source stem (e.g. coconut alcohol). If the original natural distribution has been significantly cut or enriched, the mixture is named on the basis of the predominant component.
19. Names of lanolin derivatives usually contain the stem 'lan', e.g. Lanet-60.
20. Because of the existing widespread use of these denominations, alkanolamides are named from the parent alkyl amide and the appropriate abbreviation for the amine used, e.g. Cocamide MEA.
21. The dimethyl term is omitted and is assumed in all alkyl dimethyl amine oxide names (e.g. Stearamine oxide). Tertiary amine oxides with different substituent groups are named completely (e.g. Dihydroxyethyl stearamine oxide).
22. Quaternary, ammonium salts usually have the suffix '-ium' in the stem of the cation. The term 'monium' describes a monomethyl-substituted quaternary nitrogen; 'dimonium' describes a dimethyl-substituted quaternary nitrogen; 'trimonium' describes a trimethyl-substituted quaternary nitrogen.
23. The terms quaternium/polyquaternium are used to describe complex quaternary ammonium salts that do not have a common name or that cannot be named by analogy to established names (e.g. Quaternium-82, Polyquaternium-20).
24. The term 'ampho' has been used as a combining term in the nomenclature for amphoteric surfactants derived from imidazoline intermediates. In naming these compounds, this stem is combined with the appropriate stem names for the substituent groupings (e.g. Sodium Cocoamphoacetate).
25. Common fatty stem terms are used to designate the alkyl portion of alkyl imidazoline compounds (e.g. Lauryl Hydroxyethyl Imidazoline) even though one carbon atom of the fatty radical becomes a member of the heterocyclic ring during the materials' manufacture.

26. Biological materials are named by specific terms (e.g. Hyaluronic Acid, Hydrogenated Menhaden Oil) when the material has been isolated, purified and chemically characterized. Alternative nomenclature for biologicals is utilized to name materials in accordance with the extent of their processing. They may have INCI names based on; (a) the Latin name of the genus, or (b) primarily on designations from Pharmacopoeias, followed by the part used if pertinent, and the type of preparation if pertinent (e.g. extract, oil, powder, etc.). For mammalian derived ingredients, usually (c) the INCI names are based on the English name of the part used, if pertinent (e.g. connective tissue, spleen, stomach, etc.) and the type of preparation, if pertinent (e.g. extract, oil).
Examples of INCI names for biologicals are (a) Brevoortia Oil; (b) Faex Extract; (c) Connective Tissue Extract.
27. Cosmetic colorants have INCI names according to the nomenclature used in Annex IV to Directive 76/768/EEC.
28. Hair dye ingredients are named according to chemical structure. In the event that chemical names are very complex, a colour/number combination is used prefixed by the letters 'HC'.
29. Denatured alcohols are designated by the INCI name 'Alcohol denat.'. Alcohol denat. Is ethyl alcohol that is denatured with one or more denaturing agents in accordance with the national legislation of each Community Member State.
30. Materials derived from plants are known as botanicals. In general, these ingredients have not undergone chemical modifications and include plant derived ingredients such as extracts, juices, waters, distillates, powders, oils, unsaponifiables, etc. They have INCI names based on the international Linné designated nomenclature of the genus and the species, followed by the plant part, if pertinent or applicable (e.g. leaf, fruit, bark, etc.), and the type of preparation (e.g. extract, oil, powder, etc.). Chemical derivatives of botanicals follow the nomenclature rules for chemicals (e.g. Cocoglyderides, Hydrogenated Castor Oil, Hydrogenated Palm Acid, Olive Acid, Palm Alcohol, Soyamide DEA, Sulfated Olive Oil, etc.).
The following references are used to establish the Linné-derived for botanicals: (a) The primary reference is Penso, G., *Index Plantarum Medicinalium Totius Mundi Eorumque Synonymorum*, O.E.M.F. Milano (1983 – ISBN N° 88-7076-027-8. (b) When the genus and species is not identified in the text cited in (a), a variety of secondary sources are utilised including the following, in order of priority: (1) Steinmetz, E.F., *Codex vegetabilis*, Amsterdam (1957); (2) Hoppe, H.A., *Drogenkunde*, 8th Edition, Walter de Gruyter, Berlin, Volume 1 (1957 – ISBN N° 3-11-00-8), Volume 2 (1977 – ISBN 3-11-006660-2); (3) Mabberley, D.J., *The Plant Book – A portable dictionary of higher plants*, Cambridge 1992 – ISBN N° 0-521-34060-8; (4) Hoppe H.A., Levring T., Tnaka Y., *Marine Algae in Pharmaceutical Science*, Walter de Gruyter, Berlin, New York, 1979.
31. Name/number combinations are used as INCI names for cosmetic ingredients only where the complexity and/or similarity of ingredients precludes assignment of reasonable nomenclature by any other means. In all cases where arbitrary numbers are used, these numbers are preceded by names suggestive of the structure or the composition of the material. Each name/number combination represents a specific ingredient that is listed in the Inventory. The following name/number series of combinations have been used:

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- (a) Benzophenone
This term is used for all benzophenon derivatives (e.g. Benzophenone-2).
 - (b) HC colour
See rule 28.
 - (c) Quaternium/Polyquaternium
See rule 23.
 - (d) Hydrofluorocarbon/Hydrochlorofluorocarbon
These terms are used for hydrohalocarbon aerosol propellants (e.g. Hydrofluorocarbon 152a, Hydrochlorofluorocarbon 142b).
 - (e) Polysilicone
common names or established conventions for silicone compounds (e.g. Polysilicone-1)
 - (f) Polyacrylate-
see rule 49.
 - (g) Polyester-
see rule 49.
 - (h) Polyether-
see rule 49.
 - (i) Polyurethane-
see rule 49.
32. Commercial raw materials are often deliberate mixtures of several components. The mixtures do not appear as such and must be identified by listing the individual components (e.g. Kathon CG: Aqua, Chloromethylisothiazolinone, Methylisothiazolinone, Magnesium chloride, Magnesium nitrate).
33. The INCI names for extracts represent the ‘material extracted’ and don not include reference to the extracting solvents and/or other diluents that may be present in these materials.
34. Solvents and/or diluents contained in commercially available raw materials such as surfactants, polymers and resins are not normally identified as part of the INCI name.
35. Polyethylene glycol (polyoxy-1, 2-ethanediyl) is abbreviated to the acronym “PEG”.

Polyethylene glycol homopolymers are named as PEG-X, where X is the average number of ethylene oxide monomer units, e.g. PEG-10.

Ethoxylated alcohols are named by combining the conventional alcoholic stem name with the suffix “eth” followed by the average number of ethylene oxide monomer units, e.g. Laureth-10.

Esters of polyethylene glycol homopolymers are named as PEG derivatives, e.g. PEG-10 stearate.

Other ethoxylated substances are named accordingly, e.g. PEG-6 cocamine.

Because names based on the approximate molecular weight of the ethylene oxide polymer are also in common use, the following table is provided to allow easy conversion between the two systems :

Approximate Molecular Weight	Average Number of Monomer Units
100	2
200	4
300	6
400	8
450	9
500	10
600	12
1000	20
1540	32
1800	36
2000	40
3000	60
4000	75
6000	150
8000	180

36. Polypropylene glycol (polyoxy-1, 2-propanediyl) is abbreviated to the acronym “PPG”.

Polypropylene glycol homopolymers are named as PPG-X, where X is the average number of propylene oxide monomer units, e.g. PPG-10.

Esters and ethers of polypropylene glycol homopolymers are named as PPG derivatives, e.g. PPG-10 stearate, PPG-10 lauryl ether.

Other propoxylated substances are named accordingly.

37. PEG and PPG polymers or their derivatives in which one of the terminal primary alcohol groups (-CH₂OH) has been oxidised to a carboxylic acid (-COOH) are named by adding the term “carboxylic acid” or “carboxylate” to the parent name of the original polymer, e.g. PEG-10 carboxylic acid, Cocerth-7 carboxylic acid, Ammonium laureth-8 carboxylate.
38. The term ‘Pareth’ applies to ethoxylated parffinic alcohols containing both even- and odd-carbon chain length fractions.

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39. The term ‘Acrylates’ is used to describe linear, non-cross linked copolymers that contain combinations of acrylic acid, methacrylic acid and their methyl, ethyl, propyl or butyl esters. Similarly, the term ‘Crotonate(s)’ is used to describe the copolymers that contain combinations of crotonic acid and its methyl, ethyl, propyl or butyl esters.
40. The name ‘Carbomer’ is used to describe high molecular weight cross-linked homopolymers of acrylic acid. The cross-linking agent(s) is (are) identified in the ingredient entry definition. (See also rule 41)
41. The term ‘cross-polymer’ is used to describe polymers other than Carbomer that are cross-linked. (See also rule 40)
42. The term ‘Poloxamer’ denotes a symmetrical block copolymer formed by ethoxylation of polypropylene glycol. Substances with differing degrees of polymerisation are further identified by a code number derived from the molecular weight of the polymer.
43. The term ‘Merxapol’ denotes a symmetrical block copolymer formed by the propoxylation of polyethylene glycol. Substances with differing degrees of polymerisation are further identified by a code number derived from the molecular weight of the polymer.
44. The term ‘Poloxamine’ denotes a symmetrical block copolymer formed by successively propoxylating then ethoxylating ethylene diamine. Substances with differing degrees of polymerisation are further identified by a code number derived from the molecular weight of the polymer.
45. Copolymers of ethylene glycol and propylene glycol which do not form symmetrical block copolymers are named as PEG/PPG-X/Y derivatives where X and Y are the average number of ethylene oxide and propylene oxide monomer units respectively.
46. The term ‘Alkoxyno-n’ means an ethoxylated alkyl phenol where n indicates the average number of ethylene oxide units.

When the name is :	the alkyl is :
octoxynol	tetramethylbutyl
nonoxynol	nonyl
dodoxynol	dodecyl
pentadoxynol	pentadecyl

47. Biotechnological materials are substances derived by the action of micro-organisms, such as bacteria or yeasts, on a substrate to produce materials by fermentation, metabolism, hydrolysis, lysis or other processes. The process may involve the use of nutrients or other materials such as enzymes. The resulting product is referred to as a ‘culture’ or ‘ferment’. The ferment can be further processed by extraction, filtration, and/or other procedures to yield the final product.

The conventions used to provide INCI names for biotechnological materials are as follows:

- (a) When the end product produced from a given ‘ferment’ or ‘culture’ has a common or usual name, such name may be used, e.g. Yogurt, Gellan Gum or Xanthan Gum.

(b) When the end product does not have a common or usual name, the product will be named using the genus of the micro-organism, followed by a slash and the name of the substrate (if applicable), followed by the work 'ferment'. Substrates will be identified by their common, usual, or other technical name, e.g. Lactococcus/Carrot Ferment. On a case-by-case basis, the genus and species name of the micro-organism may be used when the use of the genus only may be misleading and the identification of the species is needed for clarity, e.g. *Candida bombicola* Ferment.

(c) If the selected components of the ferment have been isolated and purified to a significant extent and analytical evidence is provided, the name for one or more of the components may be used, e.g. Glycosphingolipids, Beta-Glucan or Dextran.

48. The term 'Ceramide' as part of an INCI name will be assigned to those classes and structures of natural lipids derived from skin as reported by Wertz P.W., Miethke M.C., Long S.A., Strauss J.M. and Downing D.T. in '*The composition of ceramides from human stratum corneum and from comedones*', *The Journal of Investigative Dermatology*, **84**, 410-412 (1985).

A synthetic N-acylated sphingoid base that is identical to any one of the many constituents of the natural ceramides, as reported by Wertz, will be assigned an INCI labelling name using the term ceramide followed by a number (e.g. Ceramide 3) or a number and Roman numeral (e.g. Ceramide 6II). The term ceramide as part of the INCI name will only be assigned to a synthetic N-acylated sphingoid base that contains, as the predominant component, the erythro isomer of at least one of the many natural ceramides described by Wertz. A predominant component is one that is present at the highest concentration in relation to other synthetic materials of similar structure and related composition present in a mixture.

Synthetic N-acylated sphingoid bases that do not have the erythro configuration, or otherwise are not constituents of natural ceramides as described by Wertz, will not be named using the term ceramide. In such cases, a chemical or other appropriate name, to be determined by the International Nomenclature Committee (INC) on a case-by-case basis, will be assigned as the INCI labelling name. The INC may accept a signed statement by a person requesting the assignment of an INCI name that a synthetic N-acylated sphingoid base is the erythro isomer and otherwise conforms in composition to the above criteria.

49. The term 'Aminoacrylates' refers to simple aminoacrylates, in which the substituted alkyl groups attached to amino nitrogen range from C1-4, and acrylates conform to the definition as described in rule 33.
50. Synthetic peptides consisting of 2 to 10 amino acid residues are named using the appropriate prefix, di-, tri-, tetra-, etc., followed by the term peptide and an arbitrary number, e.g. Dipeptide-2.

Synthetic peptides consisting of 11 to 100 amino acids are designated by the term oligopeptide, followed by an arbitrary number.

Synthetic peptides consisting of more than 100 amino acids are designated by the term polypeptide, followed by an arbitrary number.

The amino acid residues composing the peptide are listed alphabetically in the entry definition in Section 1.

The amino acid residues may include the following :

Alanine	Glutamine	Phenylalanine
Arginine	Glycine	Proline
Asparagine	Histidine	Serine
Aspartic Acid	Isoleucine	Threonine
Cysteine	Leucine	Tryptophan
Cystine	Lysine	Tyrosine
Glutamic Acid	Methionine	Valine

51. Polymer nomenclature – Polymeric materials are named according to the name in common usage if it is well known, or by the structure if well defined. If no common name exists, and the structure is not well defined, the polymers are named according to their source, as described below.

Homopolymers (consisting of one constituent monomer) are named by placing the term ‘poly’ before the constituent monomer, e.g. Polyisobutene.

Copolymers and Crosspolymers (consisting of two or more constituent monomers) are named by listing the monomers separated by a slash (/) followed by the work ‘Copolymer’ or ‘Crosspolymer’, respectively, e.g. Acrylates/Acrylamide Copolymer, Acrylates/VA Crosspolymer.

Copolymers consisting of four or more monomers may be given an INCI name according to their class followed by an arbitrary number, e.g. Polyester-1, with the monomers listed in the entry definition of the material. Such nomenclature is granted at the discretion of the INC, with a purpose of shortening lengthy INCI names.

Thus far, the only classes of polymers to be created for this type of nomenclature are Polyesters, Polyacrylates and Polyurethanes. More classes may be added in the future, if the need arises.

ABBREVIATIONS

The following abbreviations are used alone or as combining forms for the naming of cosmetic ingredients in the Inventory :

AMP	Aminomethyl propanol
AMPD	Aminomethyl propanediol
BHA	Butylated hydroxyanisole
BHT	Butylated hydroxytoluene

CHDM	Cyclohexanedimethanol
CI	Colour index
DEA	Diethanolamine
DEDM	Diethylol dimethyl
DIBA	Dihydroxyisobutylamine
DIPA	Dlisopropanolamine
DMAPA	Dimethyl aminopropylamine
DMDM	Dimethylol dimethyl
DMHF	Dimethyl hydantoin formaldehyde resin
DNA	Deoxyribonucleic acid
DVB	Divinylbenzene
EDTA	Ethylenediamine tetraacetic acid
EDTHP	Ethylenediamine tetrahydroxy propylene
EDTMP	Ethylenediamine tetramethylene phosphonate
GLY	Glycine
HC	Hair colour
HCl	Hydrochloride
HEDTA	Hydroxyethyl ethylenediamine triacetic acid
MA	Maleic anhydride-
MDM	Monomethylol dimethyl
MEA	Monoethanolamine
MEK	Methyl ethyl ketone
MIPA	Monoisopropanolamine
NTA	Nitrilotriacetic acid
PABA	p-Aminobenzoic acid
PCA	Pyrrolidone carboxylic acid
PEG	Polyethylene glycol
PEI	Polyethylenimine
PG	Propylene glycol
PPG	Polypropylene glycol
PTFE	Polytetrafluoroethylene
PVM/MA	Polyvinyl methyl ether/Maleic anhydride
PVP	Polyvinylpyrrolidone
RNA	Ribonucleic acid
SE	Self-emulsifying
SIP	Sulfoisophtalate
SMDI	Saturated methylene dithenyldiisothionate
TDI	Toluene diisocyanate

TEA	Triethanolamine
TIPA	Triisopropanolamine
VA	Vinyl acetate

ANNEX : LIST OF INGREDIENT FUNCTIONS

ABRASIVE

Removes materials from various body surfaces or aids mechanical tooth cleaning or improves gloss.

ABSORBENT

Takes up water- and/or oil-soluble dissolved or finely dispersed substances.

ANTICAKING

Allows free flow of solid particles and thus avoids agglomeration of powdered cosmetics into lumps or hard masses.

ANTICORROSIVE

Prevents corrosion of the packaging.

ANTIDANDRUFF

Helps control dandruff.

ANTIFOAMING

Suppresses foam during manufacturing or reduces the tendency of finished products to generate foam.

ANTIMICROBIAL

Helps control the growth of micro-organisms on the skin.

ANTIOXIDANT

Inhibits reactions promoted by oxygen, thus avoiding oxidation and rancidity.

ANTIPERSPIRANT

Reduces perspiration

ANTIPLAQUE

Helps protect against plaque.

ANTISEBORRHOEIC

Helps control sebum production.

ANTISTATIC

Reduces static electricity by neutralising electrical charge on a surface.

ASTRINGENT

Contracts the skin.

BINDING

Provides cohesion in cosmetics.

BLEACHING

Lightens the shade of hair or skin.

BUFFERING

Stabilises the pH of cosmetics.

BULKING

Reduces bulk density of cosmetics.

CHELATING

Reacts and forms complexes with metal ions which could affect the stability and/or appearance of cosmetics.

CLEANSING

Helps to keep the body surface clean.

COSMETIC COLORANT

Colours cosmetics and/or imparts colour to the skin and/or its appendages. All colours listed are substances on the positive list of colorants (Annex IV of the Cosmetics Directive).

DENATURANT

Renders cosmetics unpalatable. Mostly added to cosmetics containing ethyl alcohol.

DEODORANT

Reduces or masks unpleasant body odours.

DEPILATORY

Removes unwanted body hair.

DETANGLING

Reduces or eliminates hair intertwining due to hair surface alteration or damage and, thus, helps combing.

EMOLLIENT

Softens and smoothens the skin.

EMULSIFYING

Promotes the formation of intimate mixtures of non-miscible liquids by altering the interfacial tension.

EMULSION STABILISING

Helps the process of emulsification and improves emulsion stability and shelf-life.

FILM FORMING

Produces, upon application, a continuous film on skin, hair or nails.

FOAMING

Traps numerous small bubbles of air or other gas within a small volume of liquid by modifying the surface tension of the liquid.

FOAM BOOSTING

Improves the quality of the foam produced by a system by increasing one or more of the following properties: volume, texture and/or stability.

GEL FORMING

Gives the consistency of a gel (a semi-solid preparation with some elasticity) to a liquid preparation.

HAIR CONDITIONING

Leaves the hair easy to comb, supple, soft and shiny and/or imparts volume, lightness, gloss, etc.

HAIR DYEING

Colours hair.

HAIR FIXING

Permits physical control of hair style.

HAIR WAVING OR STRAIGHTENING

Modifies the chemical structure of the hair, allowing it to be set in the style required.

HUMECTANT

Holds and retains moisture.

HYDROTROPE

Enhances the solubility of substance which is only slightly soluble in water.

KERATOLYTIC

Helps eliminate the dead cells of the stratum corneum.

MASKING

Reduces or inhibits the basic odour or taste of the product.

MOISTURISING

Increases the water content of the skin and maintains it soft and smooth.

NAIL CONDITIONING

Improves the cosmetic characteristics of the nail.

OPACIFYING

Reduces transparency or translucency of cosmetics.

ORAL CARE

Provides cosmetic effects to the oral cavity, e.g. cleansing, deodorising, protecting.

OXIDISING

Changes the chemical nature of another substance by adding oxygen or removing hydrogen.

PEARLESCENT

Imparts a nacreous appearance to cosmetics.

PLASTICISER

Softens and supple another substance that otherwise could not be easily deformed, spread or worked out.

PRESERVATIVE

Inhibits primarily the development of micro-organisms in cosmetics. All preservatives listed are substances on the positive list of preservatives (Annex VI of the Cosmetics Directive).

PROPELLANT

Generates pressure in an aerosol pack, expelling contents when the valve is opened. Some liquefied propellants can act as solvents.

REDUCING

Changes the chemical nature of another substance by adding hydrogen or removing oxygen.

REFATTING

Replenishes the lipids of the hair or of the top layers of the skin.

REFRESHING

Imparts a pleasant freshness to the skin.

SKIN CONDITIONING

Maintains the skin in good condition.

SKIN PROTECTING

Helps to avoid harmful effects to the skin from external factors.

SMOOTHING

Seeks to achieve an even skin surface by decreasing roughness or irregularities.

SOLVENT

Dissolves other substances.

SOOTHING

Helps lightening discomfort of the skin or of the scalp.

STABILISING

Improves ingredients or formulation stability and shelf-life.

SURFACTANT

Lowers the surface tension of cosmetics as well as aids the even distribution of the product when used.

TANNING

Darkens the skin with or without exposure to UV.

TONIC

Produces a feeling of well-being on skin and hair.

UV ABSORBER

Protects the cosmetic product from the effects of UV-light.

UV FILTER

Filters certain UV rays in order to protect the skin or the hair from harmful effects of these rays.
All UV filters listed are substances on the positive list of UV filters (Annex VII of the Cosmetics Directive).

VISCOSITY CONTROLLING

Increases or decreases the viscosity of cosmetics.