

Introduction

- **Cosmetic safety**

- Cosmetic safety is the scientific study of the cosmetic and cosmetic formulations on the human health.
- Although Cosmetics are considered as less regulated products than drugs but still safety is the primary concern.
- Every country has a government regulatory organization to address all the issue related to drugs and cosmetics safety and also some private associations and organizations are active to address this.
- Country have made different laws and acts to ensure the public health by using cosmetics and Cosmeceuticals. For e.g. India has The Drugs and Cosmetics act.

COSMOS

- Standard has been developed at the European and international level by
 - BDIH (Germany),
 - COSMEBIO & ECOCERT (France),
 - ICEA (Italy) and
 - SOIL ASSOCIATION (UK)
- who are the founders of the COSMOS-standard AISBL (an international non-profit association registered in Belgium)

COSMOS

- In 2002, the five major European organic and natural cosmetics standard-setting organizations came together to harmonize their respective standards.
- Between them these standards are used by over 1600 companies manufacturing and selling over 25,000 products in more than 45 countries worldwide – some 85% of the certified cosmetics market.
- **a non-profit international association to own, manage and develop the Standard of the cosmetic product.**
- independent and open to all and therefore it could serve the public interest for the benefit of all.
- The COSMOS-standard AISBL received its Royal Assent from the Belgian authorities in June 2010.

Guiding principles of COSMOS.

- The COSMOS-standard applies to cosmetic products that are marketed as organic or natural. Its guiding principles are to:
- promote the use of products from organic agriculture, and respect biodiversity;
- use natural resources responsibly, and respect the environment;
- use processing and manufacturing that are clean and respectful of human health and the environment;
- integrate and develop the concept of “Green Chemistry”.

COSMOS-standard's: Objectives

- The COSMOS-standard's ultimate objective is to address the major issues essential to the environment and welfare of man on the planet. For practical purposes, it aims to ensure the transition between today's and tomorrow's possibilities of technological advances to promote the development of cosmetics ever more natural and organic. This is necessary for the respect of consumers who must be informed clearly and transparently so that they can themselves be actors for sustainable development.

- **What the COSMOS-standard covers**
- The standard divides the type of ingredients used in cosmetic products into five categories and specifies the requirements for each. Here they are with some of the key standards:
- **Physically processed agro-ingredients** – may be plant, animal or microbial origin but no GMOs, no critically endangered species, only products of (not a part of) animals;
- **Chemically processed agro-ingredients** – same as above, and the chemical treatments must respect the principles of Green Chemistry with the resulting ingredients complying with strict limitations of toxicity and biodegradability;
- **Water** – must comply with hygienic standards.

- **Minerals and ingredients of mineral origin** – must be of natural origin and may be modified with simple chemical reactions.
- **Other ingredients** – a very limited list of preservatives and some other ingredients and petrochemical moieties are temporarily allowed and are reviewed on a regular basis, taking into account availability of acceptable alternatives.
- Companies must also ensure their **packaging** is minimised and is **environmentally friendly** and they must have an **environmental and waste management plan** for their factories.

- Finally, all the products produced to these standards have to be certified by an independently authorised certification body. This makes sure that the certification body is competent and professional. They will check everything necessary about the product to verify it complies with the standard and is labelled accurately and clearly, so you can have confidence in what you are buying.

The documents published with the standard include:

- › The Control Manual: describes how the control systems works
- › The Labeling Rules: explains how to use COSMOS labels
- › The Technical Guide: additional information

› This Standard applies to cosmetic products marketed as organic or natural and cosmetic ingredients with organic content. To be certified these products must comply with the defined criteria on:

- › Origin and processing of ingredients
- › Composition of total product
- › Storage, manufacturing and packaging
- › Environmental management
- › Labelling and communication
- › Inspection, certification and control.

Composition of total product

7.1 Rules for cosmetic products under organic certification

7.1.1 Ingredients

At least 95% of the physically processed agro-ingredients must be organic

7.1.2 Total product

At least 20% of the total product must be organic

7.2 Rules for cosmetic products under natural certification

There is no requirement to use a minimum level of organic ingredients

7.3 Calculation rules for natural origin percentage

% natural origin of total = [weight of total product – weight of non-natural origin ingredients (appendix V.1) – weight of petrochemical moieties (appendix V.3) / weight of all ingredients] x 100.

Storage, manufacturing and packaging

8.1 Storage

8.2 Manufacturing

8.3 Packaging

8.4 Fabrics

Accepted Materials	Non accepted materials
Wood	materials Polyvinyl chloride (PVC) and other chlorinated plastic
Aluminium	Polystyrene
PE, PET, PP, PETG	Materials or substances that contain, have been derived from, or manufactured using, genetically modified organisms
Glass	
Paperboard	
PLA (non GMO) Any other 100% natural origin	