



CANCER - Causing Chemicals

in Cosmetics & in Daily Use Products

- Soaps
- Shampoos
- Toothpastes
- Baby baths
- Baby lotions
- Powder
- Mouthwashes
- Face creams
- Facial cleansers
- Body foams
- Shower creams
- Lipsticks
- Hair conditioners
- Eye shadows
- Perfumes
- Hair gels
- Deodorants
- Shaving creams
- Anti-perspirants and more...

Use this to protect yourself and your loved ones against unscrupulous companies that lace their products with carcinogens, and governments that allow such products to be sold to us.

Preface

As Indians grow more affluent and as our society modernises in the mould of Western societies, we are faced with two menacing problems-an increase in the use of dangerous toxic chemicals in our daily lives and a corresponding increase in cancers to epidemic levels. Cancer has become a leading cause of illness and deaths.

For the first time in the world, a groundbreaking study to reveal cancer-causing agents in cosmetics and daily use products was carried out by *Utusan Konsumer* Consumer's Association of Penang (CAP) newspaper in December 1998.

For the first time, consumers were told exactly what cancer-causing chemicals were found in which brand of product. The issue became so popular that they continued to expose the cancer-causing chemicals in different ranges of products for another 1½ years. The survey ended in June 2000.

This article is a compilation of the series of *Utusan Konsumer* articles published during that period.

Cancer Shock in Cosmetics

In a typical day, the modern man or woman brushes his/her teeth with toothpaste; gargles with a mouthwash; bathes using soap; shampoo (for the hair)-and later styling gel/mousse; washes his/her face with a cleanser or scrub; then tones it with a toner.

For the woman, the beauty regimen is followed by a moisturizer, foundation or compact/loose powder; blusher for the cheeks; eyeliner, eyebrow pencil, eye-shadow and mascara for the eyes; and lip gloss or lipstick.

For the man, shaving cream, a few pats of aftershave and powder.

To smell good, you use a deodorant/antiperspirant and splash on some perfume or cologne.

By the time you're thoroughly cleansed and groomed, you would have absorbed into your body 9 chemical compounds that are known human carcinogens (cancer-causing agents).

You will also have exposed yourself 10 times to a group of chemicals that are often contaminated with a carcinogenic by product or that regularly react to form a potent carcinogen during storage and use.

At least 50 cancer-causing chemicals present in 120 cosmetics and daily use products !

Your family's trusted soap, shampoo and tooth paste, the bubble bath and lotion your baby uses every day; your favourite face cream, lipstick, perfume and cleanser and for the men your shaving cream, aftershave lotion, hair gel and even face scrub-may all give you **CANCER**.

The study recently checked the contents of 120 cosmetics and personal care products commonly used by men, women, children and babies and found them to be very likely to contain no fewer than 50 cancer-causing agents.

At least 10 of the ingredients identified in our check are **known human carcinogens**.

In addition, 20 other ingredients are **hidden carcinogens** in the form of chemical formation, break-down or contamination. Of these, 6 chemical ingredients can form potent carcinogens while at least 7 types of ingredients in numerous products may be contaminated with carcinogenic impurities. Another 7 ingredients may release a carcinogen or break down into it.

The final cluster of chemical ingredients are the **suspected carcinogens**. They have been linked to cancer in lab tests. 15 chemical ingredients were found to be in this category.

The cancer hazards lurk in practically all types of cosmetics and toiletries, ranging from baby baths and body foams to shaving creams, lipsticks, perfumes and even shampoos !

Our tabulation shows that a typical category of product can have up to 22 potential cancer-causing agents in them. So each time you shampoo or dye your hair, wash your face with a cleanser, or colour your eyelids or mouth, you could be absorbing hundreds of cancer-causing chemicals through your skin and into your bloodstream.

We bring you the frightful details in this exclusive guide.

RECENTLY, in an exhaustive market survey and random label analysis of 120 cosmetics and daily use products, CAP found All to contain at least one or more of the following:

Ingredients which are **known human carcinogens** (cancer-causing agents)

Substances which **may be contaminated with carcinogenic** (cancer-causing) **by-products**;

Substances that **can react with other chemicals to form potent carcinogens** during storage and use; or;

Chemicals which are **suspected human carcinogens** or which have been **linked to cancer** in animal tests.

Our research identified at least 60 known or suspected carcinogenic chemicals that can be commonly found in cosmetic products.

A quick check of the ingredient declarations stated on the 120 products that we surveyed found **at least 50** such chemicals to be

present or are likely to be present!

How deadly is a typical cosmetic or personal care product?

Read on

- Eyeshadow can have up to 22 carcinogens and possible carcinogens in it ;
- Lipstick and Facial cleanser (21 each)
- Hair dye and Shampoo (17)
- Face lotion/cream (17):
- Baby bath (16)
- Lip balm/gloss (14)
- Foundation and Facial mask (12 each):
- Shaving cream /foam and eye and facial makeup remover (11 each)
- Conditioner (10)
- Perfumes /colognes (9)
- Body foam/Shower cream, Facial scrub, Toothpaste and Hair gel/mousse (8 each)
- Body lotion and Deodorants /Antiperspirants (7 each)
- Baby lotion and Nail polish (6 each)
- Compact /Loose powder. Aftershave and Soap (4 each)
- Toner, Eyebrow, pencil and Eyeliner (3 each)
- Mascara and Sunscreens / Sunblocks (2 each) and
- Mouthwash (1)

All unsafe

What is shocking is that All the categories (31 all together) of **cosmetics** (e.g. eyeshadows, eyebrow pencil, eyeliner, mascara foundation nail polish, makeup removers toners compact and loose powder) **personal care products** (e.g., : hair gels and sprays, fragrances, antiperspirants and deodorants, and sunscreens) and **daily use items** (e.g., toothpaste, mouthwash, soaps, and shower creams, shampoos, and conditioner) that we checked are potentially carcinogenic.

They include **world-famous brands** (like Johnson's, Loreal, St. Lves Mary Quent, Maybelline, Estee Lauder, Freeman, Wella, Organics, Fernand Aubry, Constance Carroll, Lancome Chanel, Cover Girl, Miners Christian Dior, Banana Boat, Coppertone, Cabot, Almay and Simple); trusted **local household names** (like colgate, Darlie, Palmolive, Oil of Olay, Hazaline, Pond's, Brylcreem, Blore, Eversoft, Organic Aid, Gillete, Anakku, Tollyjoy, Doremi Aroma, Pantene and clairol); and popular **direct-selling products** from Avon, Amway and CNI.

Human carcinogens

Among the carcinogenic (and potentially carcinogenic) chemicals found in or label check are **mineral oil, coal tar** ingredients (i.e. phenylenediamines. synthetic colours and saccharin) **benzene** derivatives (chemicals labelled as just 'fragrance' on products) and **talc**.

Suntreated and mildly treated mineral oils, coal tar benzene and talc containing asbestiform fibres are 4 of 70 chemicals classified as Group 1 carcinogens, i.e. 'material known to be carcinogenic to humans' by the World Health Organisation's International Agency for Research on Cancer (IARC).

- We found a total of 23 products with Mineral Oil, They range from baby lotions and face creams to eyeshadows and hair conditioner. (This does not include 5 samples with petrolatum, better described as a "mineral oil jelly", which exhibits many of the same harmful properties as mineral oil and should thus be treated with the same caution.)

- COAL TAR ingredients turned up on the labels of at least 71 products that we checked. They range from lipsticks and eyeshadows to face creams and perfumes.

Of these, 66 had either one or more of 4 notorious synthetic colours — **FD & C Blue No. 1** (in 20 products). **FD & V Yellow**

NO.5 (25 Products) **FD & C Yellow NO. 6** (9) and **D&C Red No. 33** (in 12 products).

FD& C Blue No. 1 is a known carcinogen. As for FD& C Yellow Nos. 5 and 6 and D&C Red NO. 33, impurities found in commercial batches of these colours have been shown to cause cancer not only when ingested but also when applied to the skin.

Some artificial coal tar colours also contain heavy metal impurities, including arsenic and lead, which are carcinogenic.

(Note : Our tabulation is based on just the above 4 colours, if all synthetic colours stated on labels are taken into account, the actual number of products with coal tar colours sold would run into hundreds.)

- PHENYL- ENEDIAMINES turned up in at least 3 products – all hair dyes.

- SACCHARIN, a synthetic compound derived from coal tar, an artificial sweetener that has been proven to cause bladder cancer in animal studies, turned up in 2 toothpastes that we checked.

Saccharin can also promote the cancer-causing effects of other carcinogens.

- “FRAGRANCE” was found in a whopping 68 products – ranging from baby lotions and baths to face creams and cleansers, deodorants, shaving creams, shampoos and conditioners.

Contrary to what its name implies, the word “fragrance” does not denote just one ingredient. Fragrances used in cosmetics are derived from mixtures of 600 or more raw materials and synthetic chemicals.

According to the 1986 Report by the Committee on Science and Technology of the US House of Representatives, some 95% of chemicals used in fragrances are synthetic compounds derived from

petroleum. Some of the compounds could thus include benzene derivatives which are known to be present in petroleum.

Carcinogenic fragrance chemicals can be absorbed through the skin. For example, one widely used fragrance throughout the 1970s, acetylenyl-tetramethyltetralin (AETT) was shown in animal tests to be readily absorbed through the skin.

The chemical not only dyed the inner organs of test animals blue, but also damaged the brain and spinal cord.

It was banned only after products containing it have been widely distributed and used by consumers for many years.

- TALC was listed on 12 products checked in our survey. Cosmetic talc is reportedly carcinogenic as it can be contaminated with asbestos fibres, which can be inhaled when applying makeup. (There is no safe level for asbestos exposure.)

Clear evidence exist that inhaling talc and using it in the genital area causes ovarian cancer.

Asbestos is also known to be a cocarcinogen, ie., it can potentiate the activity of substances that cause cancer.

Regulated carcinogen

Besides the above we also found a total of 34 products to contain formaldehyde; and ingredients like **2-bromo-2intropance,1,3-diols** (also known as BNPD of Bronopol), **urea, diazolidinyl urea, imidazolidinyl urea, DMDM hydantoin** and **Quaternium-15**- all of which either contain formaldehyde, may release formaldehyde, or may break down into formaldehyde.

Formaldehyde is a carcinogen and neurotoxin. It is regulated by the US Occupational Safety and Health Administration (OSHA) as a carcinogen, and is one of 57 chemicals in the IARC’s Group 2A list of substances that are “probably carcinogenic to humans”.

Mutagenic and potentially carcino-genic chemicals

We also found **sodium lauryl sulphate** (SLS) and the alcohol form of SLS and the alcohol form of SLS, sodium laureth sulphate (SLES) in a total of 17 samples.

Japanese studies have found SLS to be a mutagen. According to toxicologists, any chemical capable of causing mutations is likely to increase the risk of cancer.

Alone the chemical is harmful enough. But it can also react with other chemicals used in cosmetics to form nitrates. Nitrates are known cancer-causing agents.

According to experts, once nitrates have formed, they can enter the bloodstream in large numbers from shampooing, and from using bubble bath, shower gels and facial cleansers.

SLS and SLES are reportedly the only known cleansing agents in shampoos and cleaners to enter the blood system.

CARCINOGENIC COSMETICS LONG KNOWN

The toxicity and cancer-causing potential of many ingredients used in cosmetics and personal care products have long been known.

- For example, the US FDA has known since 1979 that cosmetics may be contaminated with cancer-causing nitrosamines. In the 1970's it published a notice in the Federal Register which urged the cosmetics industry to remove nitrosamines (namely nitrosodiethanolamine, in short NDELA) from cosmetics.

Although the industry has made some progress by using higher quality control standards in its selection of raw materials, an FDA report from the late 1980's noted that some 37% of the products tested still contained carcinogenic nitrosamine impurities – see also “Chemicals that can form potent carcinogens” on Page 22.

(**Note** : According to some reports, cosmetics are the second source of cancer-causing nitrosamines, after tobacco)

- According to researcher-lecturer Debra Lynn Dadd in her 1986 book, *The Nontoxic Home*, “an investigation done by *consumer Reports magazine* (published by the US Consumers' Union) revealed about **20 different chemicals used regularly in hair –colouring products that are potential human carcinogens**”.

In 1989, a House subcommittee asked the US OSHA (Occupational Safety and Health Administration) to analyse 2,983 chemicals used in personal care products. The results were as follows: 884 of the ingredients were found to be toxic. Of these, 778 can cause acute toxicity, **146 can cause tumours**, 218 can cause reproductive complications, 314 can cause biological mutation, and 376 can cause skin and eye irritations.

More recently (6 September 1997). *The Boston Globe* reported that the US general Accounting Office (a nonpartisan agency within the legislative branch of the US government) has identified more than **125 cosmetic ingredients suspected of causing cancer**-and others that may cause birth defects.

CAP's discovery of some 50 known and potential cancer-causing agents in numerous cosmetics and personal care products sold is thus just the tip of the iceberg.

What is a carcinogen?

DORLAND'S *Illustrated Medical Dictionary* (23rd Edition) defines a carcinogen as “any cancer –producing substance”

The Merck Manual of Diagnosis and Therapy (14th Edition, 1982) - which provides useful information to practising physicians, medical students and other health professionals-describe a carcinogen as “ a chemical or physical agent that has the potential of producing neoplasia (i.e, formation of any new and abnormal growth)”.

Science- and research-based educational institutions in the US (like the Texas A & M University) consider a chemical to be a carcinogen if:

- it has been evaluated by the WHO's International Agency for Research on Cancer (IARC) and found to be a carcinogen or potential carcinogen;
- it is listed as a carcinogen of potential carcinogen in the Annual Report on carcinogens published by the US National Toxicology Program (NTP): or if
- it is regulated by the US Occupational Safety and Health Administration (OSHA) as a carcinogen

(The IARC co-ordinates and conducts research on the causes of human cancer and develops scientific strategies for cancer control while the NTP is part of the US Department of Health & Human Services, which provides information about potentially toxic chemicals to US regulatory and research agencies and the public.)

CAP's interpretation of carcinogenic chemicals for this study is in line with all of the above criteria. The 50-odd chemicals cited in this guide are either known or suspected human carcinogens- as determined by the above 3 bodies.

Our list also covers chemicals that are either confirmed or implicated in various scientific/official chemical carcinogenicity findings; widely published cosmetic, toxicity reports, articles and data; as well as recent alerts/press releases issued by various regulatory bodies/educational institutions abroad.

Intended as a 100% cautionary guide, our listing takes into account even those chemicals with minimal, or potential carcinogenic risks (including cancer-causing chemicals which the label indicates may be present in the product), those which demonstrate similar properties to other proven carcinogenic chemicals (eg: petrolatum which has similar properties as mineral oil), as well as broad-category ingredients (eg. fragrance which consists of many different

chemicals) which may have carcinogenic compounds.

As ours is only a selective list and some cancer-causing agents could have been overlooked, the actual number of cancer-causing chemicals in a typical cosmetic product could be more than what we have highlighted.

Chemicals that can form potent carcinogens

Four types of chemicals discovered in our survey may also pose a hazard for nitrosamine formation.

They are **Diethanolamine** and its derivatives

Triethanolamine

2-Bromo-2-nitropropane-1,3-diol and

Padimate –O.

In an attempt to overcome the problem, some manufacturers reportedly add ingredients such as antioxidants to products containing these chemicals that may slow or retard, but do not prevent., formation of nitrosamines.

So to be on the safe side, it is better to avoid buying products containing them.

Here are the details :

Diethanolamine

• **Diethanolamine** (also known as **DEA**) – Used as a wetting agent in cosmetics. Recent evidence revealed in early 1998 indicates that DEA is a potent carcinogen.

An NTP study found an association between the topical application of DEA and certain DEA-related ingredients and cancer in laboratory animals.

In March 1998, the NTP announced that it has recently found that repeated skin application to mouse skin of DEA or its fatty acid derivative, Cocamide DEA induced liver and kidney cancer.

Following the report, the FDA announced a review of the information along with other data and studies to assess risk to humans and any possible regulatory action.

High concentrations of DEA-based detergents are commonly used in a wide range of cosmetics and toiletries, including shampoos, hair dyes and conditioners, lotions, creams and bubble baths, besides liquid dishwashing and laundry soaps.

A check of safety factsheets for DEA reveals that the most probable route of exposure to this chemical is dermal exposure (ie via the skin) to products such as soaps, shampoos, cosmetics and detergents that contain this chemical. (It is estimated that oral exposure of just 20 grams is enough to kill a person.)

Lifelong use of these products thus clearly poses avoidable cancer risks to consumers, particularly infants and young children.

Further increasing these cancer risks is long-standing evidence that DEA readily interacts with nitrite preservatives or contaminants in cosmetics or toiletries to form another potent carcinogen, nitrosodiethanolamine (NDELA)

(It has been known in the US for over 2 decades that DEA reacts with nitrites in cosmetics to form NDELA).

NDELA, which like DEA, is also rapidly absorbed through the skin, is well recognised by US Federal agencies and institutions at the World Health Organisations as a carcinogen.

In 1979, the US FDA warned that 40% of all cosmetic products were contaminated with NDELA. In 2 FDA – confirmed surveys in 1991, 27 out of 629 products were found to be contaminated with high concentrations of this carcinogen.

Based on this information, the European Union and European industry have both taken strong action to reduce or eliminate DEA and NDELA from cosmetics and toiletries.

According to reports, European governments and industries have phased out use of DEA since the 1980s.

In 1996, the US Cancer Prevention Coalition petitioned the FDA to phase out the use of DEA or to label DEA-containing products with an explicit cancer warning.

The US Cosmetics, Toiletries and Fragrance Association itself has also warned industry to discontinue the uses of DEA.

But it is reported that neither the FDA nor the cosmetic industry has taken need of the warning.

DEA-related ingredients (eg. Stearamide DEA, Lauramide DEA and cocamide DEA) - Although DEA itself is used in very few cosmetics, DEA-related ingredients like these are widely used in a variety of cosmetic products.

These ingredients function as emulsifiers or foaming agents. According to the FDA, they are generally used at levels of 1-5%

We found the above 3 DEA-related ingredients in 19 products including shaving foam.

Triethanolamine

Triethanolamine (also known as **TEA**) or bound with other chemicals (eg. **TEAsodium lauryl sulphate**)-Contained in many coconut oil products. Often used in cosmetics to adjust the pH, and as a thickener and foam booster,

TEA will react with nitrates (used as a preservative or present as contaminants and not disclosed on cosmetic labels), forming nitrosamines (that can rapidly penetrate the skin), which are carcinogenic

We found TEA and TEA-related ingredients in 19 products, including mascara and makeup remover.

(Note : Neither DEA nor TEA is carcinogenic. But their presence (especially DEAs) in cosmetics with nitrites can cause a chemical reaction during formulation or even as products sit on store shelves.

This reaction leads to the formation of nitrosamine -most nitrosamines, including those formed from DEA or TEA are carcinogenic.

Although not all products with TEA (or DEA) contain nitrosamines, there is no way to know, especially if the product does not have ingredient declarations)

BNPD

also known as **2-bromo-2-nitropropane-1,3-diol** or **Bronopol**- Another hidden hazard sometimes found in shampoos.

This chemical poses similar hazards for nitrosamine formation when combined with TEA or DEA, according to *The Safe Shopper's Bible* (a highly acclaimed 1995 book which evaluates some 3,500 consumer products for undisclosed carcinogenic ingredients and contaminants)

We found it in 4 products in our survey.

Padimate – O

(also known as **octyl dimethyl PABA**) – Found in cosmetics, especially sunscreens, Can also cause formation of nitrosamines, according to *The Safe Shopper's Bible*

The jury is however, still out on the nitrosamine formed from Padimate-O. But until the industry proves that the nitrosamine by-product formed is not carcinogenic, consumers should still avoid it as a precaution.

According to the book, which is co-authored by Professor Samuel Epstein - a world renowned authority on the causes and prevention of cancer and one of the winners of the 1998 Right Livelihood Award, 'One of the most expensive lines of cosmetics today, *Chanel*, often uses this chemical'

“So do many leading brands of baby products. And *The Body Shop*, whose product sales are built on a reputation of containing natural ingredients, also offers products containing this chemical”, the book says.

We found it in a sample of lip sunblock.

Chemicals that can be contaminated with carcinogenic impurities

CAP's random survey also found a total of 100 products which can be contaminated with carcinogenic impurities.

The products are identifiable by the prefixes, words or syllables “PEG”, “-eth-“, “-oxynol-“, “polyethylene”, polyethylene glycol” and polyoxyethylene”

According to the FDA, cosmetics containing detergents, foaming agents emulsifiers and certain solvents with all these names may be contaminated with 1,4 dioxane, which has been shown to produce cancer of the liver and nasal turbinates in animal tests, as well as systemic cancer in skin painting tests.

1,4 dioxane is on the IARC's Group 2B list of 224 “materials that are possibly carcinogenic to humans”.

According to the US Environmental Protection Agency (EPA), 1,4-dioxane can be absorbed through the skin.

Professor Samuel Epstein- a Professor of Occupational and Environmental Medicine at the University of Illinois (at Chicago), and chairman of the Cancer Prevention Coalition-cautions in *The Safe Shopper's Bible*;

'Products containing **DEA** or **TEA**, **PEG** compounds, ethoxylated alcohols, or **polysorbate 60 or 80** should not be used – unless the manufacturer provides label certification that states the product is free from nitrosamines or 1, 4 dioxane.

Our check shows that none of the labels of products with such ingredients sold here carries any such assurance of safety.

Nitrosamines, though not primarily used in cosmetics, are cautionary chemicals. They are formed when two otherwise safe ingredients, nitrous acid and amines, are combined. Readily absorbed into the skin, the result is highly carcinogenic.

In fact, according to some reports, nitrosamines are absorbed into the skin in far greater amounts than when nitrite-preserved foods (such as bacon) are eaten.

To avoid the problem, it is best to steer clear of products containing DEA or TEA in the name (for example : TEA-lauryl sulphate or cocamide DEA).

Same ingredient, different names

Checking a cosmetic or personal care product label for cancer-causing chemicals can be daunting and confusing, as our experience shows. This is because many such ingredients go by different names or alphanumerals (letters of the alphabet plus number).

Here are some of them :

- **Mineral oil** – Paraffin, paraffin oil, paraffinum liquidum
- **Formydehyde** – Quaternium-15, DMDM hydantion, MDM hydantion, methanel
- **Urea**- Imidazolidinyl, urea (Germal II), Diazoldinyl urea (Germal 115)
- **BNPD** – 2 bromo-2-nitropropane-1,3-diol (or Bronopol)
- **FD&C Blue No. 1**- CI 42090
- **FD&C Yellow No. 5** – CI 19140
- **FD&C Yellow No. 6** – CI 15985
- **D&C Red No. 33** – CI 17200
- **Titanium dioxide** – CI 77891
- **DEA** – Diethanolamine

- **TEA** – Triethanolamine
- **Sodium laureth sulphate** – Sodium lauryl ether sulphate
- **Padimate – O** – Octyl dimethyl PABA
- **Kathon GC** – Methylisothiazolinone, Methylchloroisothiazolione
- **BHA** – Butylated hydroxyanisole
- **Fluoride** – Sodium monofluorophosphate, Sodium, fluoride

Greater exposure from skin absorption

Your skin is the largest living organ of your body and many cancer-causing chemicals can be absorbed through it into the bloodstream.

Research at the University of Pittsburgh shows that twice as much toxic chemicals can enter our body through the skin as through the intestine.

Cosmetic ingredients, especially, are most certainly absorbed through the skin.

According to a study quoted in *The Safe Shopper's Bible*, 13% of the cosmetic preservative, butylated hydroxytoluene (BHT) and 49% of the carcinogenic pesticide DDT (which is found in some cosmetics containing lanolin, according to a 1988 US survey) is absorbed through the skin.

Some chemicals may penetrate the skin in significant amounts, especially when left on the skin for long periods, as in the case of facial makeup.

In the case of nitrosamines (which frequently contaminate cosmetics), they are absorbed into the skin in far greater amounts than when nitrite-preserved foods (such as bacon) are eaten.

Dr. David H. Fine, the chemist who uncovered nitrosamines in cosmetics, estimates that a person would be applying 50-100 micrograms (mcg) of nitrosamine to the skin each time he or she uses a nitrosamine-contaminated cosmetic.

By comparison, a person consuming sodium-nitrite-preserved bacon is exposed to less than 1 mcg of nitrosamine.

Because many of these products are also used by children and young adults, the potential for long-term exposure can be considerable.

Some chemicals – like saccharin and fluoride in toothpaste; and alcohol in mouthwash-can also be ingested during use.

For example, a 1997 survey done with the help of toothpaste manufacturers and the American Dental Association found that you can ingest nearly half your daily allowance of fluoride (ie 1 gram) each time you brush your teeth.

List of Cancer - Causing Ingredients

Below is a list of carcinogens and potential by carcinogenic chemicals found in CAP's survey of 120 cosmetics and toiletries.

Confirmed Cancer - Causing Ingredients

These are internationally recognised human carcinogens and chemicals related to them - according to the World Health Organisation (WHO) and US government health agencies.

Confirmed human cancer-causing ingredients include :

1. Phenylenediamines
2. Saccharin
3. Mineral oil
4. Petrolatum
5. FD&C Blue No.1
6. FD&C Yellow No. 5
7. FD&C Yellow No. 6
8. D&C Red NO. 33
9. Fragrance *(which may have benzene derivatives)
10. Talc (which may be contaminated with asbestos)

*Besides benzene fragrances may also be derived from **aldehydes**; or may contain **toluene, methylene chloride, limonene, benzyl acetate, aniline-D5** and **safrole**; or may have been manufactured with dimethyl sulphate. All these 8 compounds have been found by the US EPA, NTP and House of Representatives' Committee on Science and Technology to be carcinogenic.

Hidden Cancer - Causing Ingredients

These include :

- (a) ingredients which can form nitrosamine, a human carcinogen,
 - (b) ingredients that can be contaminated with carcinogenic impurities, and
 - (c) ingredients that may release a probable human carcinogen (formaldehyde) or may break down into it.
- (a) ingredients with hazards for nitrosamine (a human carcinogen) formation include :
11. Cocamide DEA
 12. Stearamide DEA
 13. Lauramide DEA
 14. Trithanolamine (TEA)
 15. 2-bromo-2-nitropropane-1,3-diol (BNPD or Bronopol)
 16. Padimate – O (octyl dimethyl PABA)

(b) ingredients that may be contaminated with carcinogenic impurities include :

24. "PEG" ingredients
25. "-eth-" ingredients
26. "-oxynol-" ingredients
27. polyethylene
28. polythene glycol
29. polysorbate 60
30. polysorbate 80

(c) Probable human carcinogen (form-aldehyde) and ingredients that contain this carcinogenic agent, may release

it, or may break down into it :

24. Formaldehyde
25. BNPO
26. Urea
27. Imidazolidriny l urea
28. Diazolidinyl urea
29. DMDM hysantoin
30. Quaternium – 15

Suspected Cancer - Causing Ingredients

Among the suspected human carcinogens and chemicals linked to cancer in laboratory tests are :

31. Polynylpyrrolidone (PVP)
32. Sodium Lauryl Sulphate (SL)
33. Sodium Laureth Sulphate (SLES)
34. Methylisothiazoli 0 None
35. Methylchloroisothia – Zolinone
36. Kathon GC
37. Alcohol
38. Lanolin And /Or Lanolin Compounds
39. Butylated Hydro-xyaniosole (BHA)
40. Fluoride
41. Carageenan
42. Oxybenzone
43. Bensophenone - 3
44. Titanium Dioxide
45. Denatured Alcohol]

Cancer hazards in face creams or lotions, body lotions and baby lotions

Three categories of commonly used products by women and babies are face creams and lotions, body lotions and baby lotions. We found a total of 20 cancer-causing ingredients in this group of

products, 6 of which are confirmed cancer-causing ingredients, 10 are hidden cancer-causing agents, and 4 are suspected carcinogens.

Oil of Olay Moisturizing cream

- ☒ Mineral oil
- ☒ Petrolatum
- ☒ D&C Red No. 33
- ☒ “PEG” ingredient
- ☒ Imidazolidinyl
- ☒ Fragrance
- ☒ “PEG” ingredient
- ☒ Quarternium -15

Freeman Cucumber And Ginseng Peel-Off Masque

- ☒ FD&C Blue NO. 1
- ☒ FD&C Yellow No. 5
- ☒ Fragrance
- ☒ “PEG” ingredient
- ☒ Denatured alcohol

Freeman Blubbery and Lavender Facial Gel Cleanser

- ☒ FD&C Blue No. 1
- ☒ FD&C Yellow No.6
- ☒ D&C Red No. 33
- ☒ Fragrance
- ☒ Cocamide DEA
- ☒ “PEG” ingredient
- ☒ ‘-eth-’ ingredient
- ☒ DMDM hydantion
- ☒ Sodium laureth sulphate (SLES)

Organic Aid E cleansing Foam

- ☒ Fragrance

- ☒ Triethanolamine (TEA) compound
- ☒ Quaternium-15

Hazeline Softening Facial Foam

- ☒ Fragrance
- ☒ Cocamide DEA
- ☒ Lauramide DEA
- ☒ Imidazolidinyl urea
- ☒ DMDM hydantoin
- ☒ Sodium laureth sulphate (SLES)

St. Ives Cucumber and Elastin Stress Gel for Eyes and Face

- ☒ FD&C Blue No. 1
- ☒ FD&C Yellow No. 5
- ☒ Fragrance
- ☒ Triethanolamine
- ☒ “PEG” ingredient
- ☒ ‘-eth-’ ingredient
- ☒ Methylisothiazolinone
- ☒ Methylchloroisothiazolinone

Alpha Pro Daily Facial Cleanser, Normal to Dry Skin (CNI)

- ☒ Cocamide DEA
- ☒ Lauramide DEA
- ☒ Sodium laureth sulphate (SLES)
- ☒ Methylchloroisothiazolinone

Cancer-causing makeup removers and toner

They work “quickly and easily” to “remove hidden dirt and makeup, even stubborn waterproof mascara” and “eliminate all traces of impurities” to “effectively cleanse” your skin. But in reality, makeup removers do more than that—they could give you cancer in the long run !

The same goes for toners that claim to “remove all traces of dirt and makeup” and refine the complexion for a newfound radiance”.

A typical makeup remover can have up to 11 cancer-causing ingredients and a bottle of toner can contain up to 3 such chemicals.

Freeman Dewberry And Peppermint Hydrating Toner

- ☒ FD&C Blue No. 1
- ☒ Fragrance
- ☒ Diazolidinyl urea
- ☒ Makeup removers and tones

Pond’s cold cream Deep cleanser

- ☒ Mineral oil
- ☒ Fragrance

St. Ives Facial Cleanser And Makeup Remover

- ☒ Mineral oil
- ☒ FD&C Yellow No. 5
- ☒ Triethanolamine (TEA)
- ☒ “PEG” ingredient
- ☒ Polysorbate 80
- ☒ Lanolin compound

Avon Moisture Effective Eye Makeup Remover Lotion

- ☒ Mineral oil
- ☒ Petrolatum
- ☒ Triethanolamine (TEA)
- ☒ “PEG” ingredient
- ☒ “-eth-“ ingredient

Loreal Plenitude Gentle Cleansing Milk

- ☒ Mineral oil
- ☒ Fragrance
- ☒ “PEG” ingredient
- ☒ Imidazolidinyl urea
- ☒ Lanolin compound