

Products to be aware of

Products	Substances to Watch out for	Short Term Effects
Nail Polish	Toluene Dibutyl Phthalate (DBP) Formaldehyde Ethyl Acetate Isopropyl Acetate	<ul style="list-style-type: none">❖ Irritation of the eyes, skin, throat, mouth and nose❖ Headaches❖ Dizziness❖ Nausea❖ Allergic reactions of the skin
Nail Polish Remover	Acetone Acetonitrile Butyl Acetate	<ul style="list-style-type: none">❖ Irritation of the skin, eyes and throat❖ Nausea❖ Dizziness❖ Headaches
Nail Hardener	Formaldehyde	<ul style="list-style-type: none">❖ Irritation of the eyes, skin and throat❖ Difficulty breathing❖ Allergic reactions of the skin
Nail Glue	Toluene Ethyl Acetate	<ul style="list-style-type: none">❖ Dry and cracked skin❖ Irritation of the eyes, nose and throat❖ Headaches❖ Dizziness

*Depending on the duration and level of exposure, more serious long-term effects can occur (cancer, liver damage and kidney damage, fatigue, weakness, complications during pregnancy)

Types of exposure

Through Breathing

It is the most common route for penetration. Multiple products used in nail salons contain volatile substances, or in other words substances that can quickly evaporate under normal temperature. Breathing this contaminated air allows multiples products to infiltrate the body.



Skin contact

Skin contact is the second most important route of entrance for chemicals. In general, liquid products can pass through this barrier. Some are more penetrating than others. The extent of penetration also depends on the exposure time with the skin and the presence of any cuts or wounds.



Ingestion

To a lesser extent, very small amounts of product can be swallowed without even knowing. For example, the consumption of contaminated foods or the direct or indirect contact between your hands and your mouth can lead to an accidental ingestion of chemical products.



Contact with the eyes

The eyes are another route of entrance for very small amounts of chemical products used in the working environment. Products in the form of gas, dust or liquid can penetrate through this route.



Once inside the body, the effects can be local or systemic. **Local effects** are limited to the site of exposure (eg: burning sensation, itching, ect). **Systemic effects** appear at other parts of the body due to the absorption of product into the bloodstream (eg: headaches, dizziness, nausea, ect). Absorption into the bloodstream can occur regardless of the route used by the product to enter the body.

How to minimize exposure

Through Breathing

- ❖ Keep product lids closed when not in use
- ❖ Do not use large amounts of product if unnecessary
- ❖ Keep products in smaller containers rather than using commercial formats
- ❖ Throw waste in a closed garbage bin and empty it frequently
- ❖ For waste soaked in product, store it in a sealed container (eg: plastic bag) before throwing it.

Skin Contact

- ❖ If an accidental spill occurs, wash the affected area immediately
- ❖ Wear clothing that limits skin exposure such as long-sleeved tops, bottoms that are at least knee length, ect.
- ❖ Close all product lids that are not in use to prevent spillage

Ingestion

- ❖ Wash hands before and after meals
- ❖ Do not eat at your workplace
- ❖ Store all foods and beverages away from your workspace and chemical products

Contact with the eyes

- ❖ Wash hands after each client
- ❖ Avoid rubbing your eyes directly with your hands (use a tissue instead)
- ❖ Keep your head at an appropriate distance when working on a client or when handling chemical products

Protection Tools

Mask

Masks protect you from dust and germs present in the air. A mask should be worn while working with artificial nails or while manipulating acrylic powders.



Gloves

Nitrile gloves are the best choice to protect your hands while manipulating nail polish remover, glue or nail polish



Long Sleeved Smocks

Smocks are used exclusively at work. Not only do they protect you, but they also help keep your clothes clean!



Safety glasses

These glasses protect your eyes against dust, liquids and chemical fumes



Storage and accident management

Storage for all products

These products and their vapor are highly flammable. Risks of fire are possible if these products are exposed to a spark, a heat source or an electric discharge. Ideally, choose a place away from heat sources and from light to avoid the risk of fire.



	Nail Polish and/or Nail Hardeners	Nail Glue	Nail Polish Removers
Skin Contact	Limited exposure on a small surface 1) Wash the exposed region with soap and water thoroughly until the nail polish comes off 2) If the nail polish is dry on the skin, apply a small quantity of solvent on a gauze pad and rub the affected region until the nail polish comes off 3) Wash the region thoroughly again 4) Avoid excessive rubbing and scratching the affected region to prevent irritation	If the product is not glued to the skin yet 1) Wash the exposed region thoroughly with water and soap If the product is glued to the skin 1) Apply a small quantity of solvent on a gauze pad and rub the affected region 2) Wash the region thoroughly again 3) Softly roll the skin or peel off the substance directly with your fingertips or a spoon	1) Rinse the exposed region with lukewarm water for 5 minutes 2) If irritation or pain persists, consult a health professional
	Exposure on a large surface 1) Apply a greasy substance (eg: unscented hand cream) on the affected region in order to soften the nail polish 2) Wash the region thoroughly with soap and water until the nail polish comes off 3) Avoid excessive rubbing to prevent irritation		
Contact with the eyes	1) Rinse the eyes abundantly with water without closing them for at least 20 minutes 2) Call the Centre antipoison du Québec (1-800-463-5060) immediately afterwards		
Ingestion	1) Wash and rinse the mouth with water 2) Do NOT induce vomiting 3) Call the Centre antipoison du Québec (1-800-463-5060) immediately afterwards		

Cosmetic waste management

By following the hazardous waste regulations for the disposal of chemical waste, workers help the environment by reducing the emission of chemicals that could potentially harm the ecosystem (or end up in air, soil and in water)

Furthermore, many of these dangerous products are recyclable or reusable; they just need to be disposed the right way. For example, one of the common practices involves throwing the closed waste containers down the sewer along with other garbage. This is devastating for our health and the environment. As an alternative, we recommend bringing these containers to ecocenters, local hazardous waste collections or specific locations that dispose these products. Finally, certain companies such as CRI Environnement collect and treat cosmetic waste in a proper manner. To see the full list of locations that collect chemical waste in your neighbourhood, we recommend that you visit the city of Montreal’s website.



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<http://rqasf.qc.ca/>

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Pharmacy students at the Université de Montréal

To download this document or to consult the references, visit: www.rqasf.qc.ca



For a better health
at your *fingertips* !



There are many cosmetic products used in nail salons. Here are certain risks related to their exposure and how to prevent them.