



Methyl Methacrylate (MMA)

Use of MMA in Nail Products

Environmental Health Guide

What is MMA?

Methyl methacrylate or MMA is a bonding agent used in artificial nail products. It is present in cosmetic nail preparations used in nail and beauty salons throughout Australia. Nail kits sold at retail outlets may also contain the chemical.

MMA sets much faster and adheres very strongly to the nail more so than other products, and is much cheaper in comparison to other products. However the use of MMA has been associated with adverse health effects.

What Health Effects are Associated with MMA?

Industrial use of MMA has been known to cause adverse health effects in some people which have included irritation of the eyes, nose, throat and respiratory tract. Persons repeatedly exposed to significant levels of MMA commonly complain of drowsiness, light headedness, dizzy spells and trembling of the hands. Its use as a nail product may contribute to nail damage and deformities in nail growth. Repeated contact with MMA can also cause allergic skin sensitisation/dermatitis with symptoms such as skin redness, itching, rash and swelling.

While consumers who use products containing MMA may be at risk of suffering adverse health effects, the risk is much higher for nail technicians who are frequently and normally exposed to the products during work activities.

How do you know if a Product Contains MMA?

- MMA is listed as an active ingredient on the label.
- The product has a strong irritating chemical odour that does not smell like other acrylic liquids.
- The product sets much harder, feels less flexible and is very difficult to file.
- The nail extensions are extremely hard or virtually impossible to remove with normal solvents designed to remove acrylic nails.
- The product may be much cheaper in comparison (approximately one third the price) to other acrylic nail alternatives.

As a consumer you have the right to ask and query the nail technician as to what product they are using.

Substitutes for MMA

There are a number of alternatives for MMA which include ethyl methacrylate (EMA), light cure gels, wraps and natural nail manicures.

Is MMA banned?

MMA is not a banned substance in Australia because MMA can be used safely. However, it is important for people to be aware of the risks associated with this product.

For further information contact the Environmental Health Directorate on 9388 4999.