

# BAHAYA AKRILIK BAGI KESEHATAN TEKNISI GIGI DI LABORATORIUM GIGI

## ABSTRAK

**Latar belakang:** Proses pembuatan gigi tiruan dan peranti ortodonti lepasan di laboratorium gigi, memerlukan bahan akrilik yang terdiri dari *poly-methyl methacrylate* (PMMA) dan *methyl methacrylate* (MMA). Bahan tersebut dapat membahayakan kesehatan tubuh. **Tujuan:** Untuk mengetahui macam-macam bahaya yang ditimbulkan bahan akrilik bagi kesehatan teknisi laboratorium gigi, serta untuk mengetahui cara mencegah dan mengatasi bahaya akrilik bagi teknisi gigi yang bekerja di laboratorium gigi. **Tinjauan Pustaka:** Bahaya paparan bahan akrilik di laboratorium gigi dapat terjadi dari kandungan cairan monomer yang bertindak sebagai alergen yang dapat masuk melalui kulit dan menimbulkan alergi kontak dermatitis. Uap monomer *methyl methacrylate* juga bersifat toksik. Debu akrilik yang terhirup dan memasuki saluran pernafasan dapat menyebabkan penyakit asma dan pneumoconiosis. Upaya pencegahan dilakukan dengan menganjurkan teknisi gigi memakai alat pelindung diri (APD) yang sesuai dan laboratorium harus berventilasi baik. **Kesimpulan:** Teknisi laboratorium gigi dapat terpapar bahan berbahaya *methyl metacrylate*. Penggunaan bahan ini dapat beresiko terjadinya gangguan kesehatan antara lain alergi, asma, dermatitis kontak, serta *pneumoconiosis*. Pencegaha dapat dilakukan dengan cara memakai alat pelindung diri (APD) yang sesuai dan benar seperti sarung tangan, kacamata, masker, dan jas pelindung.

**Kata kunci:** *methyl metacrylate*, bahaya akrilik, gangguan kesehatan.

## **ACRYLIC HAZARDS FOR THE HEALTH OF DENTAL LABORATORY TECHNICIANS**

### **ABSTRACT**

**Background:** The process of making dentures and removable orthodontic appliances in dental laboratory requires acrylic materials, which consist of poly-methyl methacrylate (PMMA) and methyl methacrylate (MMA). These ingredients may have negative effect to dental technicians' health. **Purpose:** To discover numerous hazards caused by acrylic materials, and how to make prevention towards these hazards. **Review:** The hazard of acrylic materials in the dental laboratories developed by monomer liquid, which acts as allergens that through the skin can cause allergic contact dermatitis. In addition, the cytotoxic vapor effects from methyl methacrylate monomer are also hazardous. Acrylic dust that being inhaled and entered respiration tract can caused asthma and pneumoconiosis. Therefore, dental technicians are advised to wear Personal Protective Equipment (PPE), and laboratories should be well ventilated as a prevention. **Conclusion:** Dental laboratory technicians may be exposed to hazardous materials of methyl methacrylate. These ingredients may cause negative effects for health such as allergies, asthma, contact dermatitis, and pneumoconiosis. Prevention can be done by using an appropriate Personal Protective Equipment (PPE) such as gloves, glasses, masks, and protective coats.

**Keywords:** methyl methacrylate, acrylic hazards, health problems.