

**ANALISIS MANAJEMEN RISIKO DENGAN METODE HIRARC
(HAZARD IDENTIFICATION RISK ASSESSMENT AND
RISK CONTROL) DI LABORATORIUM KIMIA
SMA NEGERI 3 SINGARAJA**

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ABSTRAK

Tujuan dari penelitian ini mendekripsikan manajemen risiko dengan Metode HIRARC di Laboratorium Kimia SMA Negeri 3 Singaraja yang dijabarkan melalui (1) hasil identifikasi bahaya yang terdapat di laboratorium Kimia SMA Negeri 3 Singaraja, (2) hasil penilaian risiko kecelakaan kerja di laboratorium Kimia SMA Negeri 3 Singaraja, dan (3) pengendalian risiko yang dilakukan untuk meminimalkan potensi timbulnya risiko bahaya di laboratorium Kimia SMA Negeri 3 Singaraja. Pendekatan yang digunakan pada penelitian ini adalah pendekatan kualitatif dengan jenis penelitian deskriptif. Subjek pada penelitian ini yaitu siswa dan guru kimia Kimia SMA Negeri 3 Singaraja. Objek pada penelitian ini yaitu risiko yang kemungkinan muncul di laboratorium Kimia SMA Negeri 3 Singaraja. Metode pengumpulan data dilakukan dengan wawancara, observasi dan studi dokumen. Teknik analisis data yang digunakan dalam penelitian ini adalah teknis analisis deskriptif kualitatif. Hasil penelitian diperoleh (1) hasil identifikasi bahaya dengan total 43 potensi bahaya diantaranya yang berasal dari kondisi laboratorium adalah 26 potensi bahaya dan yang berasal dari perilaku pengguna laboratorium adalah 17 potensi bahaya, (2) penilaian risiko dilakukan dengan matriks penilaian risiko AS/NZS 4360: 2004 yang dipakai di standar Australia dan New Zealand diperoleh hasil tingkatan risiko mulai dari *low* sebanyak 21 potensi, *moderate*, sebanyak 16 potensi hingga *high* sebanyak 6 potensi dari kondisi laboratorium dan perilaku pengguna laboratorium, dan (3) hasil pengendalian risiko dilakukan kontrol eliminasi, subsitusi, rekayasa teknik, dan penggunaan APD.

Kata-kata kunci: kecelakaan kerja, laboratorium kimia, manajemen risiko metode HIRARC.

**RISK MANAGEMENT ANALYSIS WITH HIRARC (HAZARD
IDENTIFICATION RISK ASSESSMENT AND RISK CONTROL)
METHOD IN CHEMISTRY LABORATORY**
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ABSTRACT

The purpose of this study is to describe risk management using the HIRARC method in the Chemistry Laboratory of SMA Negeri 3 Singaraja which is described through (1) the results of hazard identification in the Chemistry laboratory of SMA Negeri 3 Singaraja, (2) the results of occupational accident risk assessment in the Chemistry laboratory of SMA Negeri 3 Singaraja, and (3) risk control carried out to minimize the potential risk of hazards in the Chemistry laboratory of SMA Negeri 3 Singaraja. The approach used in this study was a qualitative approach with descriptive research. The subjects of this study were students and chemistry teachers of SMA Negeri 3 Singaraja. The object of this research is the risks that may arise in the Chemistry laboratory of SMA Negeri 3 Singaraja. Data collection methods were conducted by interview, observation and document study. The data analysis technique used in this research is qualitative descriptive analysis technique. The results of the study obtained (1) the results of hazard identification with a total of 43 potential hazards including those from laboratory conditions are 26 potential hazards and those from laboratory user behavior are 17 potential hazards, (2) risk assessment is carried out with the AS/NZS 4360 risk assessment matrix: 2004 which is used in Australian and New Zealand standards, the results of risk levels ranging from low as many as 21 potentials, moderate, as many as 16 potentials to high as many as 6 potentials from laboratory conditions and laboratory user behavior, and (3) the results of risk control are carried out by elimination, substitution, engineering, and the use of PPE.

Key words: occupational accidents, chemical laboratory, risk management
HIRARC method.