1-methoxy-2-propanol(15.6%). The GC/MSD analytical results for 29 thinners indicated that xylene, also, was the most frequent solvent(89.7%), followed by ethyl benzene(86.2%) and toluene (75.9%). Benzene was detected at the level of about 0.5% in a thinner product. Ethylene glycol ethers such as 2-ethoxy ethanol, 2-ethoxy ethyl acetate, 2-methoxy ethanol, 2-methoxy ethyl acetate and 2-butoxy ethanol, known to have hematotoxic effects(anemia and leukopenia) and adverse reproductive effects, were found in some paints, thinners and binders. Spray painters were exposed to the higher concentrations of solvent vapors than any other workers, i.e. brush painter or mixer. The average exposure levels of spray painter, mixer and brush painter to xylene were 148.8 ppm, 43.8 ppm and 15.9 ppm, respectively, and the average TLVs for mixtures were 2.61, 0.69 and 0.39, respectively. Coal tar pitch was included in some paints where polynuclear aromatic hydrocarbons could be contaminated. Inorganic pigments such as lead chromate and zinc potassium chromate were found in some paints(8%).

Key Words : shipbuilding, painting, thinner, chemical haza exposure to organic solvents, ethylene glycol ether, inorganic pigm