

Permissible Exposure Limits for Hazardous Substances (ACGIH)

Chemical	Source of Chemical	(ACGIH TLV) in ppm
Acetone	Vacuum Metalizing, Paint	*500(Short Term 750)
Aluminum (Al) welding fume	Welding	5mg/m ³
Butyl Cellosolve (2-Butoxyethanol)	Paint*	25ppm
Cadmium (Cd) welding fume	Welding	0.01mg/m ³
Chromium (Cr) welding fume	Welding	0.5mg/m ³
Copper (Cu)	Welding	1mg/m ³
Cyclohexanone	Paint*	25ppm
Ethyl Acetate	Paint*	400ppm
Formaldehyde	Plating (silver nitrate solution) and Injection Molding (by-product for acetyl resin)	Ceiling 0.3
Hydrochloric Acid	Injection Molding and Rotocast (by-product of PVC), Plating	5ppm
Iron (Fe) welding fume	Welding	5mg/m ³
Isocyanate (MDI)	Mold Casting	0.005ppm
Isocyanate (TDI)	Mold Casting	0.005ppm
Isopropyl Alcohol	Paint*, Cleaning, Hair Gel	400(Short Term 500)
Lead (Pb) welding fume	Welding, Soldering	0.05mg/m ³
Manganese (Mn) welding fume	Welding	0.2mg/m ³
Methylene Chloride (MC)	Paint*, Solvent Bonding, Cleaning, Vacuum Metalizing	50(Short Term 125)
Methyl Ethyl Ketone (MEK)	Paint*, Solvent Bonding, Cleaning	200(Short Term 300)
Methyl Isobutyl Ketone (MIBK)	Paint*, Cleaning	50(Short Term 75)
Mineral Spirits/ Stoddard Solvent (Kerosene)	Paint*, Cleaning, Vacuum Metalizing	100ppm
Nickel (Ni) welding fume	Welding	1mg/m ³
Nitric Acid	Plating	2(Short Term 4)
Nuisance Dusts	Regrind, Plastisol Powder Mixing	10mg/m ³
Phosphoric Acid	Plating	0.25(Short Term 0.75)
Respirable Dust	Color Mixing	3mg/m ³
Sodium Hydroxide	Plating, Vacuum Metalizing, Spindle Stripping	Ceiling 2mg/m ³
Styrene	Injection Molding (by-product of ABS resin)	20(Short Term 40)
Sulfuric Acid	Plating	0.25(Short Term 0.75)
Trichloroethylene (TCE)	Solvent Bonding, Paint*	50(Short Term 100)
Toluene	Paint*, Cleaning, Vacuum Metalizing.	50ppm
Total Hydrocarbons (as N-Hexane)	Paint*, Vacuum Metalizing	50ppm
Vanadium (V) welding fume	Welding	0.05mg/m ³
Welding Fumes	Welding	5.0mg/m ³
Xylene	Paint*, Cleaning, Vacuum Metalizing	100(Short Term 150)
Zinc (Zn)	Die cast	5mg/m ³