

HAZARDOUS SUBSTANCES IN CONSTRUCTION

RISKS: SK - Skin. I - Inhalation. ENT - Irritant eyes, nose, throat. SW – Ingestion

SUBSTANCE	HEALTH RISK	JOB	CONTROLS
DUSTS			
Cement (Also when wet)	SK. I. ENT.	Masonry, rendering.	Prevent spread. Protective clothing, respirator when handling dry, washing facilities, barrier cream
Gypsum	SK. I. ENT.	Plastering	Minimise handling/cutting, respirator, one-piece overall, gloves, eye protection Substitution - eg with grit, silica free sand; wet methods; process enclosure/extraction; respirator
Man made mineral fibre	I. SK. ENT.	Insulation	
Silica	I.	Sand blasting, grit blasting, scabbling granite, polishing	Off site preparation: on site - enclosures with exhaust ventilation: portable tools - dust extraction: washing facilities, respirator
Wood dust (dust from treated timber eg. With pesticide may present extra hazards)	I. SK. ENT.	Power tool use in carpentry especially sanding	Minimise dust generation; use wet methods where possible; segregate or reduce number of workers exposed; protective clothing, respirator, good washing facilities/showers. Tetanus immunisation
Mixed dusts (mineral and biological)	I. SK. ENT.	Demolition and refurbishment	
FUMES/GASES:			
Various welding fumes from metals or rods	I.	Welding/cutting activities	Mechanical ventilation in enclosed spaces: air supplied helmet: elsewhere good general ventilation
Hydrogen sulphide	I. ENT	Sewers, drains, excavations, manholes	All work in confined spaces - exhaust and blower ventilation: self contained breathing equipment, confined space procedures.
Carbon monoxide, Nitrous oxide	I.	Plant exhausts	Position away from confined spaces where possible maintain exhaust filters; forced ventilation and extraction of fumes
SOLVENTS:			
In many construction products - paints, adhesives, strippers, thinners, etc.	I. SK. SW.	Many trades, particularly painting, tile fixing. Spray application is a high risk. Most brush/roller work less risk. Regular exposure increases risk.	Breathing apparatus for spraying, particularly in enclosed spaces: use of mistless/air-less methods. Otherwise ensure good general ventilation. Washing facilities, barrier cream.
RESIN SYSTEMS:			
Isocyanates (MDI;TDI)	I. ENT. SK. SW. + Sensitisation	Thermal insulation	Mechanical ventilation where necessary; respirators: protective clothing, washing facilities. Skin checks, respiratory checks.
Polyurethane paints	I. ENT. SK. SW.	Decorative surface coatings	Spraying - airline/self contained breathing apparatus: elsewhere good general ventilation. One piece overall, gloves, washing facilities.
Epoxy	I. SK. SW.	Strong adhesive applications	Good ventilation, personal protective equipment (respirator, clothing) washing facilities, barrier cream.
Polyester	I. SK. ENT. SW.	Glass fibre claddings and coatings	As above
OTHERS:			

PESTICIDES: (EG timber preservatives, fungicides, weed killers)	I. SK. ENT. SW.	Particularly in-situ timber treatment. Handling treated timber	Use least toxic material: Mechanical ventilation, respirator, impervious gloves, one piece overall and head cover. In confined spaces - breathing apparatus. Washing facilities, skin checks. If necessary biological checks. Handle only dry material.
ACIDS/ALKALIS	SK. ENT.	Masonry cleaning	Use weakest solutions. Protective clothing, eye protection. Washing facilities (first aid including eye bath and copious water for splash removal).
MINERAL OIL	SK. I.	Work near machines, compressors, etc. mould release agents	Filters to reduce mist. Good ventilation. Protective clothing. Washing facilities: barrier creams. Skin checks.
SITE CONTAMINANTS: eg. arsenic. Phenols: heavy metals: Micro organisms etc. eg. weils disease, tetanus, hepatitis B	I. SK. SW.	Site redevelopment of industrial premises or hospitals - particularly demolition groundwork and drain/sewers	Thorough site examination and clearance procedures. Respirators, protective clothing. Washing facilities/showers; Immunisation for tetanus.