

Risk Assessment for screenprinting area

Summary of activity

Screenprinting is a manual printing process used to transfer liquid inks onto fabric, paper or other flat items. The user pulls a squeegee by hand across a polyester screen mesh which carries a stencil made of paper or vinyl, thus forcing waterbased ink through onto the workpiece in a particular design. The screenprinting area contains no electrical items, heat sources or sharps.

Hazards

1. Dropping heavy print frame when moving or reversing platen (from t-shirt to flat platen configuration)
2. Dropping heavy drawers from plan chest if fully withdrawn
3. Printing inks, pigments and print mediums in the eyes
4. Ingestion of printing inks, pigments and print mediums
5. Printing inks, pigments and print mediums left on the skin
6. Dropping drying rack shelves onto hand or arm

Persons at risk

Operator

Persons nearby, potentially including children

Initial assessment of risk

Hazard identified	Severity	Likelihood	Risk factor
Dropping heavy print frame	2	2	2
Dropping heavy plan chest drawers	2	1	2
Inks, pigments or print mediums in the eyes	2	1	2

Ingestion of inks, pigments or print mediums	1	1	2
Inks, pigments or print mediums left on the skin	1	2	1
Hands inside drying rack as upper shelves are dropped	1	2	2

Control measures

Plan chest drawers marked with grippy hazard tape. This is rough and creates enough friction to stop the drawer and prevent it being yanked out quickly. It also becomes visible well before the tipping point. Removable for eventual transportation which requires removal of the 5 heavy drawers.

Users will be trained to work slowly when reversing the platen or pulling out the drawers

Cleanup instructions will include removal of ink from the hands by washing

In case of contact with the eyes the printing area is adjacent to the sink and an eyewash station

Procedures in the MSDS will be followed

MSDS:

No hazards are associated with these materials:

Pigment (Daler Rowney System 3 Acrylic)

http://www.daler-rowney.com/files/webform/pdf/System%203%20acrylic%20colours%20MSDS%2022%20September%202011_0.pdf

Print Mediums:

Textile:

http://www.daler-rowney.com/files/webform/pdf/System%203%20textile%20printing%20medium%20MSDS%2022%20September%202011_0.pdf

General purpose (paper/non-textile):

http://www.daler-rowney.com/files/webform/pdf/System%20%20acrylic%20printing%20medium%20MSDS%2022%20September%202011_0.pdf

Pre-mixed fabric ink: Permaset Aqua Fabric Magic

(Technical Data Sheet)

http://www.permaset.com.au/uploads/56580/ufiles/1303_Permaset_TDS_Apr2013.pdf

Points system

Hazard	Score	Severity
Nil	1	Very minor injury, bruise, graze, no risk of disease.
Slight	2	Minor injury, which would allow the individual to continue work after first aid treatment on site or at a local surgery. The duration of the stoppage or treatment is such that the normal flow of work is not seriously interrupted.
Moderate	3	Temporary disability causing injury or disease capable of keeping an individual off work for three days or more and reportable under RIDDOR
High	4	Causing death, serious injury or permanent disability to an individual.
Very high	5	Causing multiple deaths and widespread destruction eg. fire, building collapse.

Hazard	Score	Likelihood
Remote possibility	1	There is really no risk present. Only under freak conditions could there be any possibility of an accident or illness. All reasonable precautions have been taken - This should be the normal state of the workplace.
Unlikely	2	This incident or illness might occur but the probability is low and the risk minimal.
Possible	3	The accident may occur if additional factors precipitate it, but it is unlikely to happen without them.

Highly likely	4	Will happen more often than not. Additional factors could precipitate an incident but it is still likely to happen without this additional factor.
Inevitable	5	<ul style="list-style-type: none"> ● A broken stair or broken rung on a ladder ● Bare, exposed electrical conductors ● Unstable stacks of heavy boxes

Risk Rating Score Definition Action

1 to 4 Low No action required

5 to 9 Moderate Reduce risks if reasonably practicable

10 to 15 High Risk Priority action to be undertaken

16 to 25 Unacceptable Action must be taken IMMEDIATELY