

## Materials Safety Data Sheet

### Terminology for beginners

#### ❖ **Hazards Identification**

This gives information about any hazards the product might present, such as being flammable, any possible adverse effects on health possible skin sensitization.

#### ❖ **Composition / Information on Ingredients**

This provides chemical structural information, or a general description of the nature of the product if it is patented.

#### ❖ **First Aid Measures**

Bearing in mind these apply mainly to large quantities, they are usually a set of basic safety procedures such as wash any contaminated part of the body thoroughly with water, and seek medical advice if necessary. Some chemicals need specialized treatment and require medical advice, but in general, craft materials are largely safe as they have passed stringent safety tests.

#### ❖ **Fire Fighting Measures**

Bear in mind these generally apply to large quantities, and would rarely apply to the individual working with small quantities in their studio. It is advisable to have a fire extinguisher suitable for use on electrical fires in the clay studio, just in the remote case the oven catches alight.

#### ❖ **Accidental Release Measures**

This usually applies to large quantities. Refer to the package advice.

#### ❖ **Handling and Storage**

This gives sensible advice for craft materials which should be followed. For some chemicals and products, they can be specific and it is important to be aware of these. Many safe products may cause minor health problems in susceptible individuals when used regularly by serious crafters, but not cause any problems in others.

#### ❖ **Exposure Controls / Personal Protection**

The term 'threshold limit' is the maximum exposure recommended before the individual may experience health problems. This is usually more applicable to warehouse or factory conditions, but is worth noting. Craft materials such as adhesives, varnishes or resins are often quite strong smelling and contain solvents, which will often recommend good ventilation, the use of gloves or eye protection, and hazards such as flammability. It is important that the

crafters/artist pay special attention to instructions on the packaging referring to handling and disposal of the product.

❖ **Physical and Chemical Properties**

This is a list of specific chemical descriptions that would be relevant to the manufacturers and warehousing companies, and of general interest.

❖ **Stability and Reactivity**

*Thermal decomposition* means the product will start to burn or breakdown/become unstable when heated over the recommended limit. For polymer clays this will be the temperature when burning is likely to occur.

*Hazardous decomposition products* mean that the product will produce other chemicals that may be potentially harmful when burnt. For example, polymer clay produces hydrochloric acid gas – an acrid, irritating vapour. However, an occasional minor incident of burning clay is unlikely to cause lasting serious health issues. It is good safe practice to ensure good ventilation, remove pets such as caged birds or pets and remove fish tanks from the area, just in case. Better still, avoid cremating your clay.

❖ **Toxicological Information**

This gives scientific or medically proven data on the harmful effects of the chemical or product on the animal or human body. However, just because none may be listed, do not assume there is none. Be cautious and use your common sense and be hygienic – wash hands and face, keep the work area tidy.

❖ **Ecological Information**

This is information, often theoretical, on the possible effects of large amounts being released into the environment via waste or sewage. Refer to disposal information.

❖ **Disposal Information.**

In general, this usually applies to small quantities in household waste. If you are planning on getting rid of larger quantities, take to your household waste disposal depot, or consider giving to other crafters, if it is useable.

❖ **Transportation Information**

This is largely referring to industrial quantities.

❖ **Regulatory Information**

R – phrases: These are the Risk phrases applicable to the product or chemical.

S-phrases : These are the Safety phrases applicable to the product or chemical.

The Risk and Safety phrases are an international standardised list of all risks to health and the safety precautions that should be taken to minimise the risk to

personal health. This list can be found at various sites on the web, but take a look at [www.ilpi.com/msds/ref/safetyphrases.html](http://www.ilpi.com/msds/ref/safetyphrases.html). These vary for US and EU, but in general are very similar. When laboratories use chemicals they will compile a Standard Operating Procedure for the method using the chemicals, and they will add the appropriate R and S phrases, as well as compiling data sheets on each individual chemical (COSHH control of substances hazardous to health in the UK). This is to allow people who work with the chemicals every day to know exactly what they are dealing with, how to minimise the risk to themselves and their colleagues, and what to do if spilled, or to deal with waste generated in the method.

This information is in general not hugely important to the artist or crafter, but is useful information to know.