

## 1. INTRODUCTION

This data sheet provides guidance on the storage, handling and processing of solid and cellular polymeric materials supplied by **METROSEAL**. The materials are a range of natural and synthetic polymers and co-polymers in both solid, cross-linked or chemically blown to form expanded cellular [ sponge ] material. Each grade of material has its own specified physical and chemical characteristics

## 2. POTENTIAL HAZARDS

### 2.1 Toxicity

Metroseal materials are chemically un-reactive and are biologically inert but certain types may stain delicate or highly polished surfaces.

### 2.2 Inhalation [ Fume Evolution ]

There is no release of any noxious fumes from Metroseal materials at ambient temperatures.

### 2.3 Ingestion

Ingestion of Metroseal materials should be avoided. The materials are inert and can be regarded as toxicologically harmless. They are not recommended for use in contact with food / drinking water unless stated by Metroseal.

### 2.4 Physical Contact

Metroseal materials are not skin irritant. Some people however may have an allergic reaction to rubbers of all types but these circumstances are rare.

### 2.5 Fire Ignition and Burning Characteristics

Unless otherwise stated on individual data sheets surface degradation will take place at temperatures above 160 degrees C and after varying periods of time will pyrolyse at above 300 degrees C producing carbon monoxide, small amounts of hydro-carbons and solid particulate matter. The evolved gases may ignite, and if so will provide heat of combustion, pyrolysing other material in the vicinity. Experience has shown that, as a norm, only the top surfaces and edges of stacks of material will burn. Some flame-retardant grades are self extinguishing but give off black smoke and acrid fumes.

## 3. Recommended Precautions for Transportation Handling and Storage

### 3.1 General

Metroseal materials are normally supplied in roll, sheet or fabricated form and unless specified would be wrapped in polythene / cardboard boxes and palletised where necessary. The products are chemically stable at room temperature and as no fumes are produced under normal conditions no special precautions need to be taken on this account.

Some materials can show deterioration in physical appearance and properties if exposed for extended periods to strong sunlight. It is therefore recommended that materials are stored out of direct sunlight.

The handling, stacking and machining of Metroseal materials can generate static electrical charges which may discharge through the operators causing minor discomfort so precautions should be made to counter this.

Metroseal materials are combustible so good housekeeping is necessary to minimize the possibility of accidental fires. Users stocking larger quantities are recommended to review their precautions and consult their Local fire prevention officer.

Units 28 & 30, Purdeys Way  
Purdeys Industrial Estate  
Rochford  
ESSEX, SS4 1ND

Phone: 01702 548800  
Fax: 01702 549966  
Email: sales@metroseal.co.uk

### 3.2 Action in the event of fire involving Metroseal materials

Any commonly available extinguisher may be used. Water, in particular in the form of a spray is found very effective but may be inadvisable under certain circumstances, for example when in close proximity to electrical installations. It is recommended that advice be sought from local Fire Authorities on equipment and procedures.

## 4. Recommended Additional Precautions

### 4.1 Effect of heat

As with all polymeric based materials most undergo minor thermal degradation at temperatures above 160 degrees C and small quantities of organic volatiles are generated.

### 4.2 Processing methods—General

The following notes are given to indicate any possible hazards associated with the conversion of Metroseal materials from sheet form into finished parts. Good housekeeping is advised for the segregation and removal from working areas of off cuts and waste should be adopted. Machines should also be cleaned regularly to remove any build up of dust, thus reducing the risk of dust ignition and explosion.

**Knife, Press and Bandsaw Cutting** - Outside of your own in-house safety regulations no special procedures need be adopted. It is however, recommended that knives and blades when sharpened are away from the cutting area so that sparks cannot impinge on off cuts or dust. For static build up some form of dissipation may be necessary by earthing or ionization of the air. **Routing and Grinding** - Normal working machinery regulations should be observed and continuous extraction of dust is recommended with dust extraction system regularly cleaned and earthed to prevent excess static build up. It should also be open to the atmosphere through an explosive panel as dust produced may be explosive when carried in an airstream.

### 4.3 Adhesives

The exposure of operators to the solvents contained in some adhesives may be subject to legal constraints and suppliers of adhesives should be contacted for further details. The handling, stacking and fabrication of Metroseal materials can generate static charges so precautions are required when used in conjunction with solvent based adhesives. The risk of fire can be reduced by adequate ventilation and installation of facilities such as ionized air blowers and corona discharge bars.

## 5. Recommended First Aid Treatment

### 5.1 Eye Injuries

Any materials entering the eye should be flushed with copious quantities of water. Medical attention should be obtained if soreness or redness persists.

### 5.2 Inhalation of Fumes from overheated material

An affected person should be removed as quickly as possible into fresh air, kept warm and artificial respiration applied if necessary. Medical attention should be obtained immediately.

### 5.3 Burns

Any molten material on the skin should be cooled as quickly as possible in cold water but should not be pulled off with medical attention being obtained immediately.

### 5.4 Ingestion

Rinse mouth with water and obtain medical attention.

### 5.5 Nasal and Aural

If small particles and sections of Metroseal materials become lodged in nasal or ear passages medical attention should be sought for their removal.

## 6. Waste Disposal

Due to the risk of fire with all Metroseal materials, off cuts and discarded wastes should not be allowed to accumulate but should be stored in containers which are themselves preferably non combustible. Waste may be disposed of by controlled incineration or burial but subject to the requirements of pollution and control legislation. Advice on preferred methods should be obtained from the local waste disposal officer.