

tenon



FlexPlus

Safety Data Sheets

Plastic

Scope

Some of our more commonly used materials are: EPDM, TPR, Nitrile, ABS and PVC.

Information on the constituent material used in the formulation of these compounds is not included except where it is relevant to the use, handling or storage.

Product Information

Compounds with a notifiable hazard, will have additional guidance provided.

Some products are supplied with a silicone coating.

Hazards

Fire In common with organic materials they can be consumed by fire.

In the case of a minor fire, all commonly available fire extinguishers are effective. Although due regard should be taken when live electrical equipment is nearby.

Fumes Our compounds burn to give dense fumes with contain carbon monoxide, carbon dioxide and hydrogen chloride.

If personnel are overcome by fumes take outside to fresh air and consult medical advice.

Skin Irritation Our products are not considered to be skin sensitisers.

Eye Irritation The basic products are not likely to cause eye irritation. However, if a silicone coating is present it can be transferred manually to the eye, where it may cause irritation which is not itself harmful. Good hygiene and care in handling should be observed in using such products.

The appropriate treatment is flush eye out thoroughly with clean warm water.

Dust Non hazardous.

Storage Store in dry, cool place making sure that the compounds are not subjected to extreme temperatures.

Ingestion Seek medical advice.

Aluminium

General Data

Although it is generally agreed that aluminium is an inert substance, hazardous situations can arise when it is subjected to various processes such as: anodising, polishing, thermal breaking, welding and information on these operations is given in the attached appendices.

Product Name and Description

Aluminium extrusions supplied in various forms. ie. mill, anodised, painted, thermally broken.

Composition

Magnesium/silicon aluminium alloys.

Physical Data

Melting point	660°
Boiling point	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Specific gravity	2.6 approximately
Solubility in water	Insoluble
Appearance and odour	Solid - grey/silver colour, no odour

Hazards

The hazards associated with aluminium are as follows:

Handling

Solid Aluminium experiences no colour change when heated - use gloves to protect against burns.

Liquid when melting, casting and processing, appropriate protective equipment must be worn- glasses, goggles or visor, metal shedding overalls, foundry footwear, gloves. All tools used with molten metal must be dry.

Fire

Not a fire hazard.

Explosion

Molten aluminium may explode upon contact with water, and many other substances including oxidising agents. All aluminium solids must be free from moisture before adding to molten metal.

Health and Toxicity

Aluminium is poorly absorbed by the body. Little of the element that gets into the body through normal action remains.

Aluminium (con't)**Precautions****Storage**

Keep dry, away from incompatible materials, including nitrates, acids and alkalis, which may result in fire and explosion.

Spillage

Solid aluminium presents no problem.

Disposal

Recycle, finely divided aluminium may be reactive and its hazard characteristics should be determined prior to disposal.

Transport

Solid and liquid aluminium are not classified as dangerous for conveyance by road in the UK.

Appendix 1**Anodising and Organic Coating**

Both anodisers and etchs produce hydrogen gas. At normal extraction rates, the hydrogen/air ratio does not present a risk unless deliberately ignited, but a low or nil extraction rate can result in the formation of an explosive mixture. Operation should, therefore, stop if the extraction system fails.

Appendix 2**Polishing**

The regulation for the grinding and polishing of metals must be observed. Extraction is essential.

Appendix 3**Thermal Break**

This product involves the exothermic interaction of two chemicals to form a polyurethane polymer: the manufacturers recommendations for handling the components must be followed. In addition, the presence of water, which modifies the reaction, must be avoided. Extraction of air from the process area is essential.

Appendix 4**Welding**

MIG welding or plasma arc cutting of aluminium alloys can generate ozone, nitric oxides and ultraviolet radiation. Ozone over exposure may result in mucous membrane irritation, as well as other pulmonary discomforts.

Cold Rolled Steel Sections**Material Composition**

Pre-Galvanised/Pre-Coated Mild Steel

Product

Steel Sections (0.4mm-2.0mm)

Uses

To be used within perimeters laid down in our catalogue and any special technical instruction.

Health Hazards

When subjected to elevated temperatures during welding or cutting, toxic fumes are produced. Inhalation of these may cause metal fume fever, a short lasting condition with symptoms similar to those of influenza. Therefore, adequate ventilation or fume extraction should be provided, and where necessary, protective masks should be worn.

Some sections may have a light film of lubricants on them. In the unlikely event of a build up of lubricants draining from a bundle of sections, heat or open flame should be kept away. Avoid prolonged contact with the skin and avoid prolonged breathing of any vapour.

Handling

Products may have sharp corners and edges which can cause lacerations. Products may have residue of lubricants/rust inhibitors on the surface which could cause problems to persons with sensitive skin. Always use suitable gloves when handling. Never rely on banding for lifting - always use suitable slings.

Storage

Products should be stored dry and stacked in a safe manner.

Health & Safety Relevant References

No. 43 Safety in Mechanical Handling
No. 47 Safety in Stacking Materials
No. EH40 Occupational Exposure Limits

Glass

Specification

Glass for use in construction, for decoration and in transport is generally of a soda lime silicate composition. Body coloured glasses for solar control and decoration are produced by small additions of suitable constituents which do not materially affect the basic properties other than those of heat and light transmissions.

Glass can also be coated to alter heat and light transmissions, again not materially affecting the basic properties.

Physical Properties

Glass is a hard, amorphous brittle substance manufactured by melting together the constituent substances at temperatures up to 1600°C.

Hazards

Soda-lime-silicate glasses are non-toxic and any additives or surface coatings are chemically bound into the glass or are present in such small quantities as to present no hazard.

Silica in the glass is present as silicates and does not present a hazard to health.

Processes such as grinding, polishing and edgeworking can generate glass dust, personal exposure to which should be kept below 10mg per cubic metre per 8 hour time weighted average (TWA) total inhalable dust or 5mg per cubic metre per 8 hour TWA respirable dust.

Grinding, polishing and edgeworking are generally carried out using water as a flux which largely eliminates the glass dust risks.

Glass may be supplied with an interleaving powder to prevent surface damage, which may contain a small amount of stain inhibitor. This may cause temporary irritation during periods of high ambient temperature.

If irritation from interleaving powder is experienced steps should be taken to reduce the airborne dust levels and/or provide respiratory protection.

Airborne interleaving powder should be controlled to less than 10mg per cubic meter per 8 hour TWA total inhalable dust or 5mg per cubic metre per 8 hour TWA respirable dust.

If the interleaving powder is left to accumulate on workspace floors, the floors may become slippery. Good housekeeping is necessary to minimise this risk.

Glass (con't)

Handling of Glass or Packages

There is a risk of breakage in transit and care should be taken when unloading.

Eye protection must be worn in accordance with the Protection of Eyes Regulations 1974. Other protective clothing such as gloves, safety shoes and headwear may be appropriate.

The greatest risk in the handling of glass is through laceration - appropriate first aid and further medical assistance should be available or easily obtainable at short notice.

Glass is brittle and especially in pack form, heavy, and hence the storage and movement of glass in warehouses also raises the need for safe working practices to be laid down.

Plasterboard Faced Honeycomb Panels**Composition**

Paper faced gypsum plaster panels laminated on either side of paper honeycomb core with low emission urea formaldehyde based adhesive, containing fillers such as gypsum and china clay and phosphoric acid based chemical hardener.

Storage

Panels should be stacked flat on a level surface either inside a building or, if outside, under a polythene sheet or tarpaulin well protected from inclement weather and rising damp. Panels should be supported on solid bearers 100 to 125mm wide, not less than the width of the panels in length and spaced not more than 400mm apart.

Handling

Panels should be carried on an edge and carefully handled to avoid damage to corners or edges. Panels should not be lifted by one leaf.

Performance In Use

The constituents of the panels, ie gypsum, paper and adhesive are considered non-hazardous. The adhesive used is a low emission urea formaldehyde type as shown by independent testing.

Cutting & Machining

Any dust arising from cutting operations shall be treated as a nuisance dust and kept below occupational exposure limits (10mg/m³ total inhalable dust and 5 mg/m³ respirable dust - 8 hour TWA values).

It is therefore advisable that any cutting or machining operations which are likely to produce dust should be carried out in adequately ventilated conditions. Where large quantities of material are being cut or machined equipment should be provided with a local extraction system and operators should wear eye protection and dust masks.

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Reaction to Fire

In burning, decomposition products will include CO₁ CO₂ ammonia, steam and smoke (derived from paper content).

Quality Assurance

All panels are manufactured to BS EN ISO 9002.