Safety Data Sheet

1. Identification of the Substance / Preparation and the Company/Undertaking

Product name	: Epoxy Resin, Part A
Product Uses	: Flexible PVC products
Supplier	: Premier Farnell plc 150 Armley Road Leeds LS12 2QQ +44 (0) 870 129 8608
Emergency telephone	: +44 (0) 8701 202530

2. Hazards Identification

This preparation contains no ingredients listed as hazardous to supply and all ingredients are bound up in the solid phase and therefore not freely available. Harmful effects are not likely to occur under normal conditions of use.

Incorrect processing, especially equipment overheat will lead to thermal decomposition. This will evolve toxic and corrosive gases and vapours.

3. Composition / Information on Ingredients

This PVC compound contains no ingredients listed as hazardous for supply.

4. First Aid Measures

4.1. Skin Contact

a. Pellets at room temperature

Wash after handling pellets and before drinking and smoking. Under normal circumstances handling pellets presents no hazard, and gloves should not be required. Should any individual suffer skin irritation, impervious gloves should be provided (though these may well be made from PVC). If irritation persists medical attention should be obtained.

b. Melt

Use heat resistant gloves and avoid skin contact with molten PVC which will burn. Douse or immerse affected area in cold water. Does not force melt from skin. Obtain immediate medical attention.

c. Processing fumes

Ideally fumes should be locally extracted away from operators, but where skin contact occurs wash with plenty of soap and water. Do not use solvents. In case of irritation obtain medical attention.

d. Decomposition fumes

Exceeding correct processing conditions will lead to decomposition of PVC compound releasing hydrogen chloride gas. Shower, paying particular attention to eyes and hair. Soak clothing in a 1% sodium bicarbonate (baking soda) solution before laundering prior to reuse.

4.2. Eye Contact

a. Pellets at room temperature

If small particles of pellet become lodged in the eye treat as for removing dust etc., from eyes. It is possible, particularly when starting machines and trickle feeding, to have harder grades of pellet thrown back from the hopper base with some force. Eye protection should be worn. If pellet is thrown into the eyes with force treat for bruising. If any irritation is apparent flush with water. If irritation persists obtain medical attention.

b. Melt

Use eye protection to prevent molten PVC being splashed into eyes. If contact occurs immediately immerse eyes in cold water to remove heat from melt. Unless molten PVC comes away from eyes without force do not attempt to pull it away. Obtain urgent medical attention. Even when PVC feels cool it will still retain heat within the melt. Continue with intermittent cold water immersion to keep solidified melt cool.

c. Processing fumes

Ideally fumes should be locally extracted away from operator. At first signs of irritation remove affected person from contact and flush eyes with clean water holding eyelids apart. If irritation persists obtain medical attention.

d. Decomposition fumes

Exceeding correct processing conditions will lead to decomposition of PVC compound releasing hydrogen chloride gas. Flush eyes with plenty of clean water for at least fifteen minutes. Obtain medical attention. Treat for exposure to acid vapour.

4.3. Inhalation

a. Pellets at room temperatures

Treat as for choking, obtain immediate medical attention. Mouth to mouth resuscitation should be used only in extreme cases as it may force pellets further into a respiratory tract.

b. Melt

In the unlikely event of inhalation of hot melt, treat as for choking but expect severe burns to respiratory tract. Obtain immediate medical attention.

c. Processing fumes

Ideally these should be locally extracted away from operators. At first signs of irritation move patient to fresh air and if breathing becomes difficult apply artificial respiration and obtain medical attention.

4.4. Ingestion

a. Pellets at room temperature

Do not induce vomiting. Wash out mouth and drink 200-300ml (half a pint) of water at room temperature. Normally pellet will travel through the digestive tract but if symptoms appear obtain medical attention.

b. Melt

Ingestion of molten PVC will cause severe burns in the mouth and digestive tract. Give cold water to reduce temperature of burned areas and obtain immediate medical attention.

c. Decomposition fumes

Exceeding correct processing conditions will lead to decomposition of PVC compound releasing hydrogen chloride gas. Give water to drink and obtain medical attention.

5. Fire Fighting Measures

5.1. Evacuate all uninvolved people to upwind of fire. In major fire consider similar evacuation of local area.

5.2. Suitable extinguishing materials are water, water mist, carbon dioxide foam, earth, sand and dry powder. Water mist will damp down hydrogen chloride fumes but will form weak hydrochloric acid. This should be neutralised with calcium carbonate (whiting). Beware of live electrical equipment when using water based extinguishers.

5.3. Unsuitable extinguishing materials – none.

5.4. For major fires and those in confined areas self contained breathing apparatus and acid resistant protective clothing should be used. Shower with plenty of water to remove acid fumes. Soak contaminated clothing in 1% sodium bicarbonate solution before re-laundering for reuse.

6. Accidental Release Measures

6.1. Sweep up or vacuum. Beware of hard pellets ‘flying’ when using brush. Eye protection should be worn.

7. Handling & Storage

7.1. Spillage. Spilt pellets present a hazard. Pellets spilt on hot parts of processing machinery should be removed as soon as it is safe to do so, otherwise decomposition and release of acid fumes will occur.

7.2. Processing. Provide adequate ventilation. Where necessary extract vapours from hot materials away from operators.

7.3. Storage. Store in dry adequately ventilated areas at room temperature. Avoid sources of heat and ignition. Store away from food, drink, animal feeds, strong acids and acetal resin. Keep packaging closed when not in use. Allow material stored in cold areas to reach room temperature before use. This avoids condensation and the possible production of steam in hot

processing machinery. Damp storage may also affect the strength of the paper packaging.

7.4. Fire and explosion. PVC is not readily ignitable but will burn releasing toxic fumes. Avoid source of ignition. Usually it is more likely that fire will be initiated by ignition of packaging (paper/polythene bags, wooden pallets or cardboard boxes) rather than the Compound itself.

8. Exposure Controls / Personal Protection

8.1. Adequate ventilation and local extraction away from the operation should be provided.

8.2. Personal protection. Maintain good industrial hygiene. Wear suitable overalls and protective clothing. Eye protection and heat resistant gloves may be required when processing PVC compounds at high temperatures.

8.3. Occupation Exposure Limits on Decomposition Products
Fire or overheating during processing of the compound will cause thermal decomposition, releasing toxic vapours.

Hydrogen Chloride	: Long Term Exposure Limit-LTEL (8 hour reference period): 1ppm (2mg.m^{-3}) Short Term Exposure Limit-STEL (15 min reference period): 5ppm (8mg.m^{-3})
Carbon monoxide	: Long Term Exposure Limit-LTEL (8 hour reference period): 30ppm (35mg.m^{-3}) Short Term Exposure Limit-STEL (15 min reference period): 200ppm (232mg.m^{-3})

9. Physical & Chemical Properties

9.1. Form. Pellets, usually cylindrical, about 3mm diameter by 3mm high.

9.2. Odour. On some grades a slight characteristic odour may be noticed, especially on first opening package.

9.3. Melting point. Softens at about 1300C.

9.4. Decomposition temperature. Decomposition depends on time and temperature but will initiate at about 1300C where it will take several hours or days. At 2000C it will increase rapidly, taking only a few minutes. Decomposition releases hydrogen chloride fumes.

9.5. Relative Density. Bulk density as pellets 0.8 to 1.5. Solid moulded or extruded objects 1.12 to 2.0 depending on grade. Foam moulding or extrusion 0.75 TO 1.2. See physical data sheets for further information.

9.6. Solubility.
a) Water. Virtually insoluble, some plasticiser extraction may take place over prolonged period
b) Granules will swell in petrol and polar solvents. Plasticiser and stabiliser will be soluble.

10. Stability & Reactivity

10.1. Stability.

If stored and used in accordance with standard practice this product is unlikely to cause harmful effects.

10.2. Conditions to avoid.

High temperatures. Will melt to a coagulated mass above 100°C, decompose at temperatures over 130°C. Also avoid sources of ignition.

Avoid Storage or Contact With Acetal Resin

10.3. Hazardous decomposition products.

Thermal decomposition will evolve toxic vapours of hydrogen chloride and carbon monoxide. Other organic decomposition products and metal oxides will also be evolved.

10.4. Reactivity.

PVC granules are relatively inert. However, avoid contact with strong oxidising agents, concentrated acids at 60°C and above and organic solvents.

Avoid Contact With Acetal Resin

11. Toxicological Information

None of the ingredients are classified as hazardous to supply.

12. Ecological Information

12.1. Break Down.

In fully gelled form PVC compound, either as pellets supplied or finished articles, is considered ecologically benign. PVC compound is not easily broken down by either micro-organisms or weathering.

12.2 Water Pollution.

Classified as WGK = 0 (self classification) (Wassergerahrdungsklasse in Germany). Not water endangering.

13. Disposal Considerations

Granules and contaminated packaging should be disposed of in accordance with national and local regulations. Consult local authorities for advice. Incinerators should be fitted with acid scrubbing and run at a sufficient temperature to avoid evolution of dioxins. Recycle if possible.

14. Transport Information

14.1 Not classified as dangerous goods under transport regulations.

14.2 Spillage on carriageway may cause slip hazard.

14.3 Extra care should be taken when moving part pallets from which the shrink or stretch wrap has been removed.

15. Regulatory Information

15.1 This PVC compound has been classified under the chemical (hazard, information and packaging) regulations (CHIP 2).

15.2 This PVC compound should not normally present any hazard to humans by inhalation, ingestion or skin contact in the form in which it is supplied. It is exempt from hazard labelling under CHIP 2 Regulation 9 and Guidance Regulation Clause 168.

16. Other Information

NA

Part Number
12468