PVC Profiles - Safety Data Sheet

1.	Substance/preparation and Company detail	PVC-U of semi-finished material Oadby Plastics Elland Road, Braunstone Frith Industrial Estate, Leicester, LE3 1TU 0116 232 1010
2.	Composition / Indications to components	Polyvinyl chloride hard and processing auxiliary materials and filling materials CAS No.: 9002-86-2
3.	Possible dangers	PVC-U is not dangerous material in the sense of the dangerous material regulation and/or pursuant to the EEC guideline in the present valid support.
4.	First-aid measures	No special measures necessarily. Notes for the physician: none.
5.	Fire-fighting measures	In general handling the material will not cause accidents. **Inhalation:** Non-relevant If exposed to combustion fumes in high concentration - bring victim to fresh air and seek medical advice. **Ingestion:** Non-relevant **Skin Contact:** Burns resulting from accidental contact with molten material must be flushed immediately with cold water. Do not remove the polymer from the skin and seek medical advice. **Skin Absorption**: Non-relevant **Eye Contact:** Like any foreign object can cause irritation to the eye, Wash thoroughly with clean water and if symptoms persist, seek medical advice.
6.	Measures in case of unintended release	**Extinguisher type** Water spray or CO2. CO2 is less recommended due to lack of cooling capacity. **Special Fire Fighting Procedures** Personnel without suitable respiratory apparatus should leave the affected area to prevent exposure to toxic or combustible gases. **Special Protective Equipment for Fire-fighters** Positive-pressure self-contained breathing apparatus, protective clothing, gas mask approved for acid vapours. **Unusual Fire and Explosion Hazards** PVC is a self extinguishing fire retardant material, that being exposed to open fire and high temperatures, decomposes emitting large quantities of HCl, which tends to extinguish the flames. It does not continue to burn after ignition without an external fire source. HCl has a strong acidic odour that causes sensory alert at very low concentrations. HCl odour threshold = 0.77 ppm. Exposure to high concentrations of HCl will cause irritation of the respiratory passages, at very high concentrations may cause burns to mucous membranes. Soot emitted when PVC is forced to burn may obscure visibility.
7.	Handling and storage	No special precautions and no personal protective equipment needed. Collect mechanically for disposal.
8.	Limitation of exposition	**Handling** **General handling precautions** Avoid contact with eyes. **Ventilation** General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled. **Other precautions** No explosion hazard. In the event of fire, cool and overlap product with water. Static electricity discharge sparks possible during handling. Avoid contact or vicinity of flammable materials. **Storage** Store in a cool shady area. No special technical protective measures required.

9.	Physical and chemical characteristics	**Personal Protection** Respiratory protection : No special protection needed Hand protection/protection gloves : No special protection needed Eye protection : No special protection needed Other protective equipment : No special protection needed
10.	Stability and reactivity	Appearance : Flat or corrugated plastic sheets Physical State : Solid Colour : Clear or coloured Odour : None Density : 1.35-1.45 gr/cm3 Heat Deflection : 62-65°C Boiling Point, 760 Hg : Not relevant Viscosity : Not relevant Solubility in Water : <0.1g/100mL at 23oC pH Value : Not relevant Flash Point : 391ºC ASTM D 1929 Auto ignition Temp. : 454oC ASTM D 1921 Flammability Limit : None Explosion Limits : None Evaporation Rate : Not relevant Percent Volatiles : Not relevant
11.	Toxic information	**Stability** Stable. **Conditions to avoid** Excessive heat, or open flame. Temperature above 150 ºC will decompose raw polymer resin and liberate HCl. **Incompatible materials** Oxidizing agents or strong mineral acids can cause reaction. **Thermal decomposition** Begins above 150ºC caused by fire, overheating during improper processing. Fumes damaging to health may be released. **Hazardous decomposition products** Burning can produce the following combustion products: Carbon monoxide (CO) - is highly toxic if inhaled; Carbon dioxide (CO2) - in sufficient concentrations can act as an asphyxiant; Hydrogen chloride (HCl) - in high concentrations cause irritation of the respiratory passages, at very high concentrations may cause burns to mucous membranes. **Reactivity** Hazardous polymerization : Will not occur Hazardous reactions : None
12.	Ecological information	PVC materials have a very low acute toxicity. In rats an acute LD50 > 10 gr/kg of body weight. PNEUMOCONIOSIS has been described from inhalation of combustion products (effects of overexposure). Industrial hygiene studies have shown that under normal and expected conditions of use of PVC materials, exposures are well below applicable limits. **Acute Toxicological Information** **Acute oral toxicity** : None **Acute percutaneous toxicity** : None **Acute vapour exposure** : None **Primary skin irritation** : No irritation **Eye irritation** : No irritation **Sensitization** : No information available **Chronic effects** : Unknown **Carcinogenicity** – None **Other Toxicological Information** No known toxicological effects with normal use. For heating see section 10. **Additional Information** No additional toxicity information currently available.

13.	Waste-disposal information	**Persistence and Degradability** Detailed studies have not been conducted concerning the environmental fate of the product. According to present knowledge no unfavourable ecological effects are to be expected. Not generally hazardous to water. Insoluble in water, non-toxic solid. Mobility : No information currently available Persistence and biodegradability: Biodegradation period - tens of years. Bio accumulative potential: No information currently available. **Environmental Risks** No hazard expectation to terrestrial or aquatic flora and fauna. **Eco toxicity** : LD50 (rats) > 10 gr/kg : IC50 (bacterial inhibition) - no data available **Aquatic toxicity** : LC50 (daphnia magna) - no data available : LC50 (fathead minnow – fish) - no data available **Other information** All available ecological data have been taken into account for the development of the hazard and precautionary information contained in this safety data.
14.	Transport information	The product is not considered hazardous under current EPA hazardous waste regulations. Recycling is the preferred method of disposal. Alternatively, the product may be disposed of in an approved landfill. High temperature incineration under controlled conditions due to formation of HCl. All wastes should be evaluated in conjunction with applicable solid and hazardous waste regulations, Toxicity Characteristic Leaching Procedures (TCLP), and disposed of as appropriate. This product does not contain any cadmium or other heavy metal pigments or stabilizers. It is the user's responsibility to dispose of all wastes in accordance with all national and local regulations at properly permitted or authorized facilities.
15.	Regulations	Additional transportation data : Not currently regulated under Department of Transportation regulations Labelling : No labelling is required in accordance with the EEC directives Placarding : No placarding is required in accordance with the EEC directives Special transport requirements : None Packaging : Avoid dark-coloured packaging to prevent heat distortion The product is classified as a non-hazardous material in the meaning of transport regulations.
16.	Further information	With regards to dust formed as a consequence of mechanical treatments, the appropriate regulations value limits for fine dust must be observed: MAC value (fine dust) – 5mg/m3. OSHA Hazard Communication Classification for dusts and combustion fumes: Irritant, Skin Hazard, and Lung Hazard. SARA Title III Classification for dusts and combustion fumes: Acute Health Hazard; Chronic Health Hazard. WHMIS Classification: Non-hazardous