



# UPVC Cladding Sheet

Colour: White  
Fire rating: Class 1 (BS479)  
FDA approved for food contact  
Meets building, food and hygiene regulations

## Data/Safety Sheet

1.	Substance/preparation and Company detail	Product Name : Rigid Polyvinyl Chloride sheets Material Name : Polyvinyl Chloride Homopolymer CAS Number : 9002-86-2 Material Synonyms : PVC NFPA Ratings : Health=1, Fire=0, Reactivity=0 Direct Plastics Ltd Unit 14 Portland Business Park, Richmond Park Road, Sheffield, S13 8HS 0114 2560889
2.	Composition / Indications to components	Calcium-Zinc stabilized PVC sheets. Pigments and additives used to enhance specific properties are encapsulated in the polymer resin matrix. No solvents. No plasticizers. No cadmium, lead, or other heavy metals used.
3.	Possible dangers	No particular hazards known. Effects of a Single Overexposure Swallowing: Non-relevant Skin absorption: Non-relevant Inhalation: Non-relevant Skin contact: Exposure is not expected to cause adverse health effects Eye contact: Non-relevant Effects of a Repeated Overexposure: None currently known Medical Conditions Aggravated by Overexposure: None currently known Other Effects of Overexposure: None

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		currently known
4.	First-aid measures	<p>In general handling the material will not cause accidents.</p> <p><b>Inhalation</b> If exposed to combustion fumes in high concentration - Bring victim to fresh air. Seek medical attention.</p> <p><b>Ingestion</b> Non-harmful. If irritation caused, seek medical advice.</p> <p><b>Skin Contact</b> Burns resulting from accidental contact with molten material must be flushed immediately with cold water. Do not remove the polymer from the skin. Seek medical attention.</p> <p><b>Skin Absorption</b> Non-harmful.</p> <p><b>Eye Contact</b> Like any foreign object can cause irritation to the eye, Wash thoroughly with clean water and if symptoms persist, seek medical advice.</p>
5.	Fire-fighting measures	<p><b>Extinguisher type</b> Water spray or CO2. CO2 is less recommended due to lack of cooling capacity.</p> <p><b>Extinguisher To Avoid</b> No information currently available.</p> <p><b>Special Fire Fighting Procedures</b> Personnel without suitable respiratory apparatus should leave the affected area to prevent exposure to toxic or combustible gases.</p> <p><b>Special Protective Equipment for Fire fighters</b> Positive-pressure self-contained breathing apparatus, protective clothing, gas mask approved for acid vapours.</p> <p><b>Unusual Fire and Explosion Hazards</b> PVC is a self extinguishing fire retardant material, which 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</p>

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		<p>ignition without an external fire source.</p> <p>HCl has a strong acidic odour that causes sensory alert at very low concentrations. HCl odour threshold = 0.77 ppm.</p> <p>Exposure to high concentrations of HCl will cause irritation of the respiratory passages, at very high concentrations may cause burns to mucous membranes.</p> <p>Soot emitted when PVC is forced to burn may obscure visibility.</p>
6.	Measures in case of unintended release	<b>No special precautions and no personal protective equipment needed. Collect mechanically for disposal.</b>
7.	Handling and storage	<p><b>Handling</b></p> <p><b>General handling precautions</b>  <b>Avoid contact with eyes.</b></p> <p><b>Ventilation</b>  <b>General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled.</b></p> <p><b>Other precautions</b>  <b>No explosion hazard. In the event of fire, cool and overlap product with water.</b>  <b>Static electricity discharge sparks possible during handling. Avoid contact or vicinity of flammable materials.</b>  <b>When opening truck or railcar for unloading, ventilate before entering.</b></p> <p><b>Storage</b>  <b>Store in a cool shady area. No special technical protective measures required.</b></p>
8.	Limitation of exposition	<p><b>Respiratory protection : No special protection needed</b></p> <p><b>Hand protection/protection gloves : No special protection needed</b></p> <p><b>Eye protection : No special protection needed</b></p> <p><b>Other protective equipment : No special protection needed</b></p>

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9.	Physical and chemical characteristics	<p><b>Appearance : Flat or corrugated plastic sheets</b>  <b>Physical State : Solid</b>  <b>Colour : Clear or coloured</b>  <b>Odour : None</b>  <b>Density : 1.35-1.45 gr/cm<sup>3</sup></b>  <b>Heat Deflection : 62-65°C</b>  <b>Boiling Point, 760 Hg : Not relevant</b>  <b>Viscosity : Not relevant</b>  <b>Solubility in Water : &lt;0.1g/100mL at 23oC</b>  <b>pH Value : Not relevant</b>  <b>Flash Point : 391°C ASTM D 1929</b>  <b>Auto-ignition Temp. : 454oC ASTM D 1921</b>  <b>Flammability Limit : None</b>  <b>Explosion Limits : None</b>  <b>Evaporation Rate : Not relevant</b>  <b>Percent Volatiles : Not relevant</b></p>
10.	Stability and reactivity	<p><b>Stability</b>  <b>Stable.</b>  <b>Conditions to avoid</b>  <b>Excessive heat, or open flame.</b>  <b>Temperature above 150 °C will decompose raw polymer resin and liberate HCl.</b>  <b>Incompatible materials</b>  <b>Oxidizing agents or strong mineral acids can cause reaction.</b>  <b>Thermal decomposition</b>  <b>Begins above 150°C caused by fire, overheating during improper processing. Fumes damaging to health may be released.</b>  <b>Hazardous decomposition products</b>  Burning can produce the following combustion products:  Carbon monoxide (CO) - is highly toxic if inhaled;  Carbon dioxide (CO<sub>2</sub>) - 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.  <b>Reactivity</b>  Hazardous polymerization : Will not occur  Hazardous reactions : None</p>

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11.	Toxic information	<p>PVC materials have a very low acute toxicity.</p> <p>In rats an acute LD50 &gt; 10 gr/kg of body weight. PNEUMOCONIOSIS has been described from inhalation of combustion products (effects of overexposure).</p> <p>Industrial hygiene studies have shown that under normal and expected conditions of use of PVC materials, exposures are well below applicable limits.</p> <p><b>Acute Toxicological Information</b>  <b>Acute oral toxicity : None</b>  <b>Acute percutaneous toxicity : None</b>  <b>Acute vapour exposure : None</b>  <b>Primary skin irritation : No irritation</b>  <b>Eye irritation : No irritation</b>  <b>Sensitization : No information available</b></p> <p><b>Chronic effects : Unknown</b>  <b>Carcinogenicity: None</b></p> <p><b>Other Toxicological Information</b>  <b>No known toxicological effects with normal use. For heating see section 10.</b></p> <p><b>Additional Information</b>  <b>No additional toxicity information currently available.</b></p>
12.	Ecological information	<p><b>Persistence and Degradability</b>  <b>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.</b></p> <p><b>Not generally hazardous to water.</b>  <b>Insoluble in water, non-toxic solid.</b></p> <p><b>Mobility: No information currently available</b></p> <p><b>Persistence and biodegradability:</b>  <b>Biodegradation period - tens of years.</b>  <b>Bio-accumulative potential: No information currently available.</b></p> <p><b>Environmental Risks</b>  <b>No hazard expectation to terrestrial or aquatic flora and fauna.</b></p> <p><b>Eco-toxicity : LD50 (rats) &gt; 10 gr/kg</b>  <b>: IC50 (bacterial inhibition) - no data available</b></p> <p><b>Aquatic toxicity : LC50 (daphnia magna) - no data available</b></p>

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		<p><b>: LC50 (fathead minnow – fish) - no data available</b></p> <p><b>OTHER INFORMATION</b></p> <p><b>All available ecological data have been taken into account for the development of the hazard and precautionary information contained in this safety data.</b></p>
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13.	Waste-disposal information	<p>The product is not considered hazardous under current EPA hazardous waste regulations. Recycling is the preferred method of disposal.</p> <p>Alternatively, the product may be disposed of in an approved landfill. High temperature incineration under controlled conditions due to formation of HCl.</p> <p>All wastes should be evaluated in conjunction with applicable solid and hazardous waste regulations, Toxicity Characteristic Leaching Procedures (TCLP), and disposed of as appropriate.</p> <p>This product does not contain any cadmium or other heavy metal pigments or stabilizers.</p> <p>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.</p>
14.	Transport information	<p>Additional transportation data : Not currently regulated under Department of Transportation regulations</p> <p>Labelling : No labelling is required in accordance with the EEC directives</p> <p>Placarding : No placarding is required in accordance with the EEC directives</p> <p>Special transport requirements : None</p> <p>Packaging : Avoid dark-coloured packaging to prevent heat distortion</p> <p>The product is classified as a non-hazardous material in the meaning of transport regulations.</p>
15.	Regulation	<p>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</p>

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		dust) – 5mg/m <sup>3</sup> . 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
16.	Further information	The information is based on our current knowledge. They are meant to describe our products in respect to safety requirements. They do not represent any guarantee of the described product in the sense of the legal guarantee regulations.

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