

Polyethylene is a thermoplastic polymer consisting of long chains of ethylene monomer. It is generally recognised as been non toxic and used safely in large quantities since the 1940's.

Its name is abbreviated to PE. PE is classified in 3 main categories depending on density and branching, either Low Density PE (LDPE), High Density PE (HDPE), or Linear Low density PE (LLDPE).

RPC bpi's healthcare products will also contain additives such as pigments, slip additives, anti-static additives, anti-bacterial, degradable and anti-block depending on individual product. These additives are used to enhance the properties of the finished product.

Physical Poperties:

Melting Point 105 - 130 Degrees °C.

Chemically inert with a high degree of chemical and water resistance.

Burning Behaviour:

Polythene film is difficult to ignite but once ignited it will burn and continue to burn even when the ignition source is removed.

Burning will be followed by an odour of paraffin accompanied by flowing or dripping. Carbon monoxide is given off. If inhaled move to fresh air and consult a Doctor.

Molten polythene should not be touched and will cause burns when it comes in contact with exposed skin. Do not try to remove the product treat the area as thermal burn and consult a Doctor.

A PE fire can be extinguished using the following media, water spray, foam, carbon dioxide and dry powder. High power jets of water are not recommended in the early stage of a fire as it could help spread the flames.

Specific Hazards associated with burning of PE:

- Temperature can exceed 280 degrees °C
- Thermal decomposition giving off toxic fumes
- Carbon Monoxide
- Carbon dioxide
- Formation of steam

Specific Hazards associated with PE in its finished state:

- May cause suffocation

Food Contact Approval

Not all PE products are approved for contact with food. Please contact RPC bpi refuse for more information.

Storage information

PE should be stored away from direct heat and prolonged periods in direct sunlight especially products that contain a degradable additive.

Identification

The recommended coding system is that of the Society of Plastics Industry. The symbol has three arrows with a central number and the type of polythene printed underneath it.





Disposal

Waste polythene can be recycled back into new products, see your waste contractor to arrange collection.

If the polythene is too contaminated such as clinical waste bags see your waste contractor for an appropriate disposal solution.

Printing Inks

To comply with the Environmental Protection Act 1990 we use water based inks on our products.

Regulatory Information

The European Chemicals Agency (ECHA) have recently added Lead Chromate & Lead Sulfochromate yellow pigments to the Candidate List of Substances of Very High Concern (SVHC) in the REACH regulations. This is a material used to pigment yellow and orange clinical waste sacks. As a result of this inclusion RPC bpi refuse have a duty to inform its customers that the chemical is present on the candidate list of substances of very high concern and to take the necessary precautions especially for disposal. It is RPC bpi refuse policy to phase out the use of these chemicals by the end of 2011.

Further information can be found at:

 $\label{list_def} $$ $$ $$ http://echa.europa.eu/chem_data/authorisation_process/candidate_list_obligations_en.asp $$$