

GLOSSARY

BENZENE A basic building block for manufacturing of many plastics, derived from coal or fractionation of oil.

CFC Abbreviation for chlorofluorocarbons – formerly used as a blowing agent for polystyrene and have been phased out in Australia for this purpose.

DEGRADATION Processes of chemical change which cause plastics and other materials to lose strength, change colour etc. Agents which accelerate degradation can include sunlight, ozone, water, elevated temperatures, bacteria and fungus.

EPS Abbreviation for expandable polystyrene bead. Used to manufacture slab insulation, produce boxes, hot drink cups, bean bag fill etc.

ETHYLENE A basic feedstock derived from crude oil or natural gas. Used to manufacture polyethylene (the world's largest volume plastic) and polystyrene.

EXTRUDED FOAM POLYSTYRENE Foam (or expanded) polystyrene produced by extruding molten polystyrene and simultaneously reducing its density by introducing gas (blowing agent) which is trapped when the polystyrene cools and hardens into a sheet. Used for low cost, hygienic retail trays for meat and vegetables.

EXTRUDER Plastics extruders contain a long mixing screw inside a heated barrel and a diehead through which the molten plastic is extruded into spaghetti like strands, then cooled before further processing. Plastic pellets are made by chopping extruded strands.

FRACTIONATION Crude oil is a mixture of many different hydrocarbon chemicals or "fractions". Fractionation processes are used to separate these chemicals from each other. The tall columns in oil refineries are commonly used for these purposes.

HYDROCHLOROFUOROCARBONS Chemical blowing agents which have much less impact on the ozone layer than the CFC's which they are replacing.

MONOMER The generic name of materials used to produce polymers. Chemicals such as ethylene, styrene, propylene are all monomers.

POLYMER Polymers or plastics are the giant molecules formed by joining together monomer molecules. For example, polystyrene is thousands of styrene molecules joined to each other.

POLYSTYRENE PRODUCER Chemical companies which convert styrene monomer into polystyrene, which is usually produced in the form of pellets and beads.

POLYSTYRENE MOULDER A manufacturer who uses heat and pressure to convert polystyrene pellets or beads into a wide variety of products like cups, biscuit trays, cassettes, pen barrels.

PS **POLYSTYRENE**
PC **PRODUCERS COUNCIL**

THE POLYSTYRENE PRODUCERS COUNCIL LIMITED
ACN 056 166 691

Private Bag 1
Altona, Victoria, 3018
Telephone (03) 368 4555
Facsimile (03) 368 4320

