

POLYPROPENE

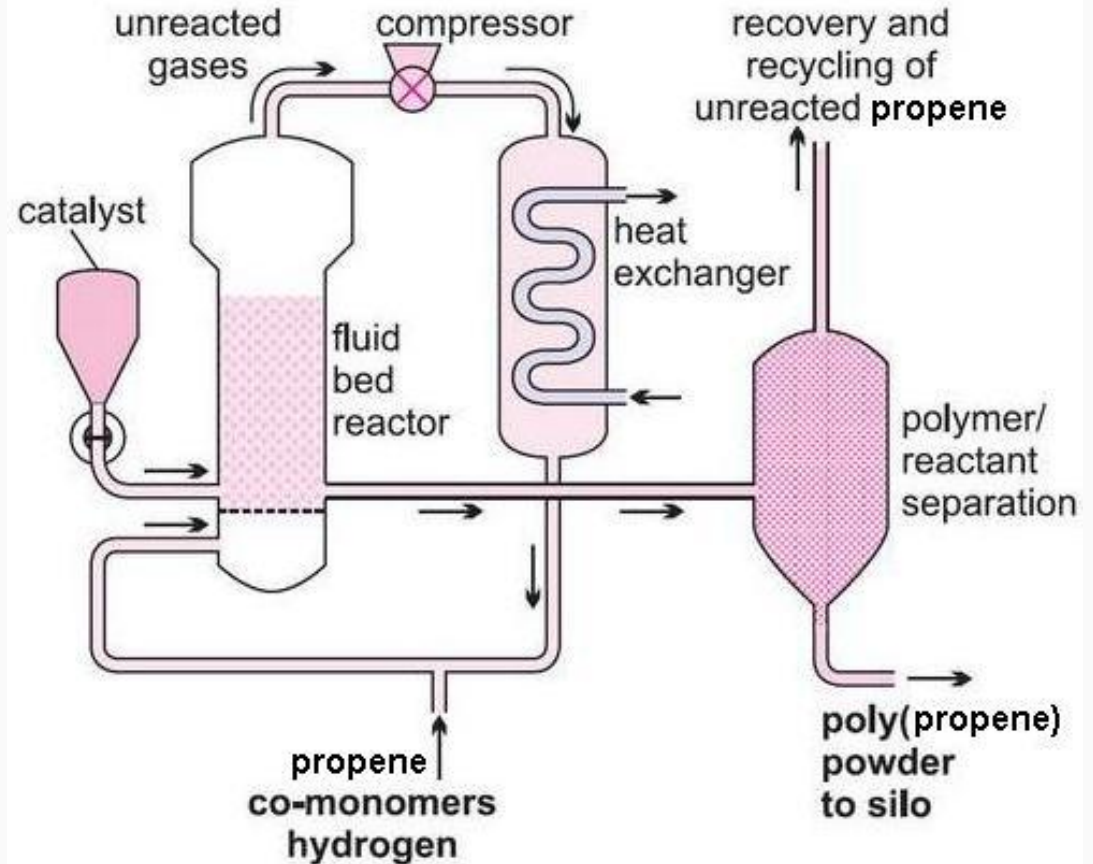
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How is polypropene made?

- Starts with distilling hydrocarbons into fractions, making them easier to use
- These are then combined into other catalysts
- This creates plastic

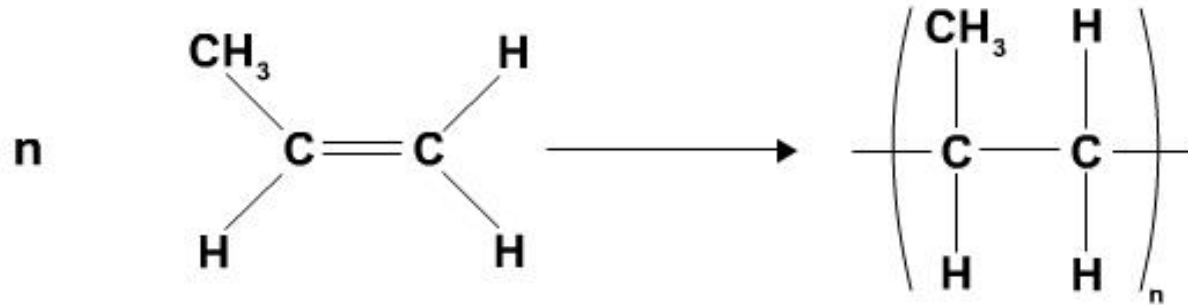
Polypropene is produced from propene and it is usually done by polymerization or polycondensation



How can polypropene be written?

- Polypropene is a carbon based fuel
- Just like the ones we have studied, it connects just like other polymers
- It has one CH₃ instead of a hydrogen

So it can be written in exactly the same way as things like propane or methane



Why is Polypropene useful?

- Polypropene is quite inexpensive
- It has high flexural strength
- It's practically water proof
- It makes a good insulator

This can make it good for things like water bottles and anything that needs to be sealed because of how strong it is



Waterproofing

Insulation

Some common uses for the fuel?

- Plastic parts
- Carpeting
- Reusable products
- Paper
- Technology
- Laboratory equipment
- Thermoplastic fiber composites

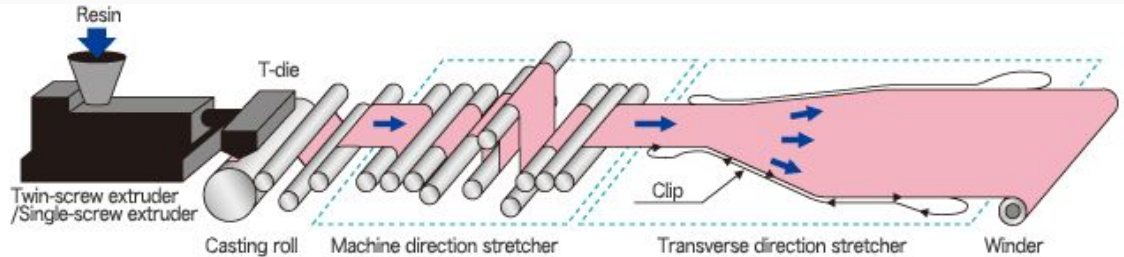
There are numerous other uses for polypropylene mainly because of how versatile this product is



How is polypropylene modified for our purposes?

- Biaxial orientation.
- Circulation type reactor
- Narrow retention time distribution.
- These methods of manufacturing modifying polypropylene make the plastics stronger and clearer.
- Biaxial orientation is the most common form of film orientation

Biaxial orientation



How is polypropylene recycled?

- Is a polymer plastic
- From the 'polyolefin' (polymers produced from alkenes) family
- The process has 5 main steps
- Collection, sorting, cleaning, reprocessing by melting and producing new products from recycled polymers



Conclusion

- So, in conclusion polypropene makes for a good plastic because of its good qualities such as how inexpensive and strong it is
- It's also very easy to make and mass produce,
- It's able to be recycled
- works well in household as well as industry

