Outreach Program: Plastics are all around us.
Support: NSF Polymer Program NSF-1308617 (PI: Chang Ryu)/RPI Polymer Center

- Mark Behar
- South Side High School: (Rockville Centre, NY)
- Picture of sample: Chap Stick cap
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- DSC Results

  Heat of Melting: 105.4 J/g
  Heat of Formation: 104.6 J/g
  **Peak Melting Temperature: 162.41°C**
  Peak Crystallization Temperature: 120.45°C
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SUMMARY

• Which polymer materials has been used? Polypropylene

• Chemical Structure of polymer:

• Polymer Recycling Code for this polymer:
Polypropylene

- Polypropylene was first synthesized in 1954 in a collaborative effort between German chemist Karl Rehn and Italian chemist Giulio Natta.
- Due to its versatility and relatively cheap production cost, polypropylene has a variety of everyday uses.
- It is commonly found in many plastic products, carpeting, reusable products, paper, technology, and laboratory equipment.
- The accepted density 946 kg/m²
- Perfectly isotactic PP has a melting point of 171 °C. Commercial isotactic PP has a melting point that ranges from 160 to 166 °C & OURS was 162.41 °C.
