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

- Sean Patterson
- Morehouse College (Atlanta, GA)
- Bottle Sampled Areas: Lid, Thread, Sidewall, and Bottom

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Heat Flow (W/g)

Temperature (°C)

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SUMMARY

• The lid is Polypropylene (PP)
  – Literature melting point at around 130 C.
  – Tg is at 0 C but not shown in our temperature range.

• The bottle is Polyethylene terephthalate (PET or PETE)
  – Literature melting point at around 260 C
  – Tg 67 C- 81C

• Chemical Structure of polymer:

  • PET ( )  PP ( )

• Polymer Recycling Code for this polymer:

  ![Recycling Code](image)

![PETE Bottle Image](image)