

WHY DETERMINE MELTING POINTS (MP'S)?

(1) A MP IS A PHYSICAL PROPERTY OF A SOLID.

- HELP IDENTIFY A COMPOUND.
- CHARACTERIZE A NEW COMPOUND.

(2) MP RANGE PROVIDES AN INDICATION OF THE PURITY OF A SOLID COMPOUND.

- NARROW RANGE -----> PURE COMPOUND
- WIDE RANGE -----> IMPURE COMPOUND

FACT: AN IMPURE COMPOUND MELTS OVER A WIDE RANGE AND AT A TEMPERATURE LOWER THAN THAT OF THE CORRESPONDING PURE COMPOUND.

- ALWAYS RECORD A MP RANGE - TEMPERATURE AT WHICH THE FIRST DROP OF LIQUID APPEARS TO THE TEMPERATURE AT WHICH THE SOLID HAS COMPLETELY MELTED.

- WHEN MEASURING THE RANGE, RAISE THE TEMPERATURE VERY SLOWLY - 1°C PER MINUTE