

Name _____
Chem 226

Section _____
Dr. Rusay

Pre lab Form
TLC of Analgesics

<http://chemconnections.org/organic/chem226/226assign-09.html#TLC>

Pre lab: Complete the following table for all of the compounds. Leave the last column, Exp. R_f , blank. (Naproxen is not one of the unknowns in the experiment, but it structurally relates to ibuprofen.) Read the on-line instructions. Prepare your lab notebook as with any prelab for initialing, except this form replaces the **Compound Data & Safety Table** portion. [Be sure to include the calculated experimental R_f values in the last column after completing the experimental procedure. Provide your unknown number on the form, circle the analgesic(s)' name(s) that are present in your unknown, and answer the on-line Post lab questions.] Turn in with final report.

| Unk #: | Structure | Function(s) | Molecular Formula | Acid/Base Polar/ Non-polar | Exp. R_f |
|--------------------|-----------|-------------|----------------------|----------------------------------|---------------|
| Analgesic | | | | | |
| aspirin | | | | | |
| acetamino- phen | | | | | |
| salicylamide | | | | | |
| caffeine | | | | | |
| ibuprofen | | | | | |
| naproxen | | | | | |

How do ibuprofen and naproxen relate structurally and stereochemically? (Briefly explain.)