FTIR and Raman Proficiency Program

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Results for October 2019 RAMAN Proficiency Testing Event

Dear Participant:

In the October 2019 Raman challenge three unknown powders were sent. All were one component samples. **RAM19-7** was glycine, CAS 56-40-6. This is a white powder and is a non-essential amino acid. It is the simplest amino acid.

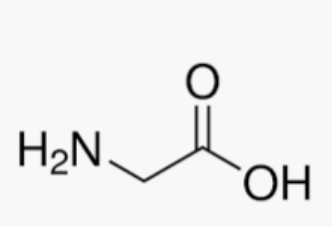

Figure 1. Glycine

Our instrument had a good spectrum, and consistently returned glycine as the top hit. Glycine is located in the Smiths Common Chemicals library. All participants correctly identified this.

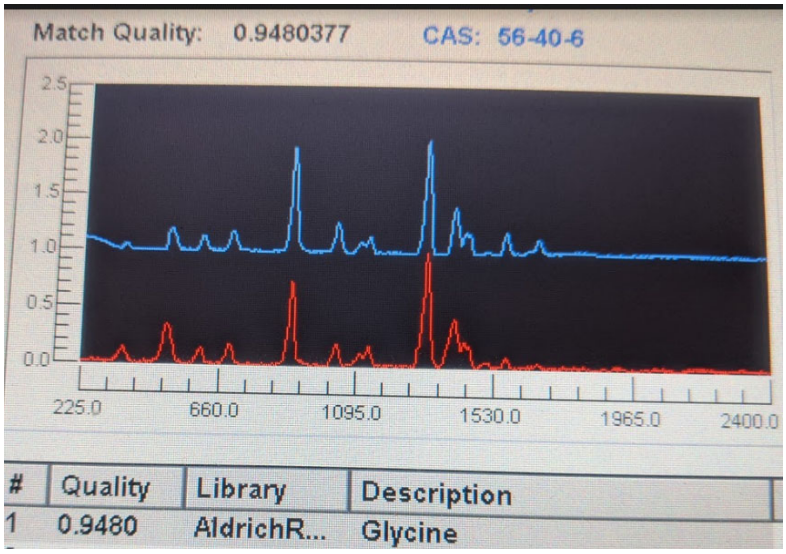

Figure 2. RAM19-7 RespondER match

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RAM19-8 was EDTA, disodium salt, CAS # 6381-92-6. It is a white crystalline material. It is a common chelator and is the anticoagulant in purple top vacutainer tubes.

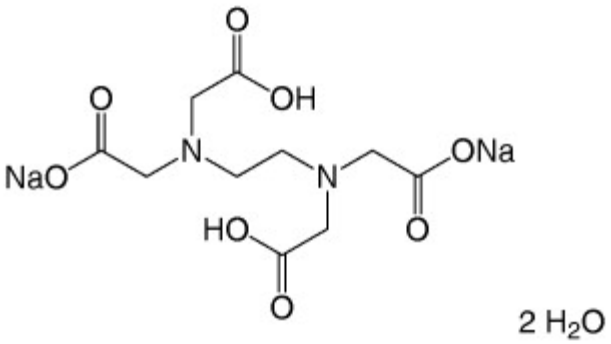

Figure 3. EDTA

This compound is listed in the Smiths Raman Common Chemicals library. Our instrument consistently returned the exact match as the top hit, but the quality never got above 0.9. All participants correctly identified this.

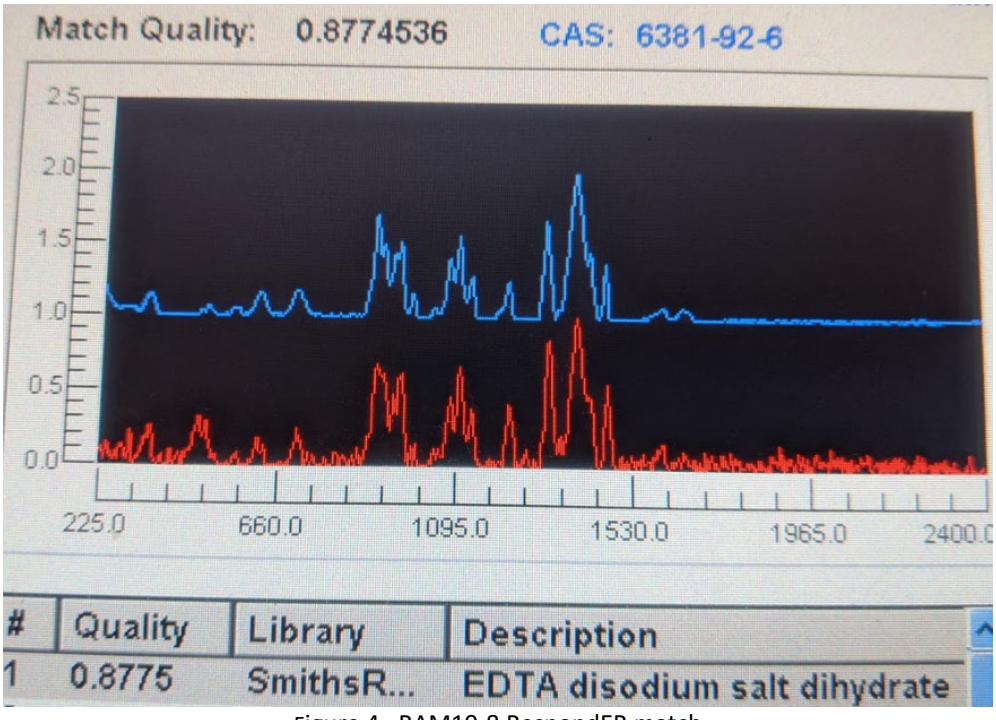

Figure 4. RAM19-8 RespondER match

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RAM19-9 was ascorbic acid, CAS 50-81-7. This is a finer white crystal and is the chemical name for vitamin C.

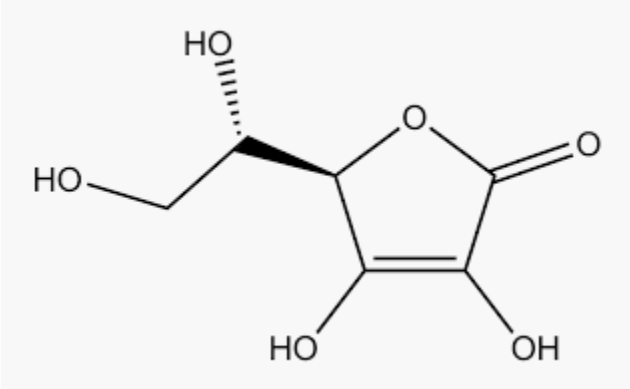


Figure 5. Ascorbic Acid

This compound was in the Smiths Common Chemicals library. Our instrument consistently returned the exact match as the top hit, but the quality never got above 0.9. All participants correctly identified this.

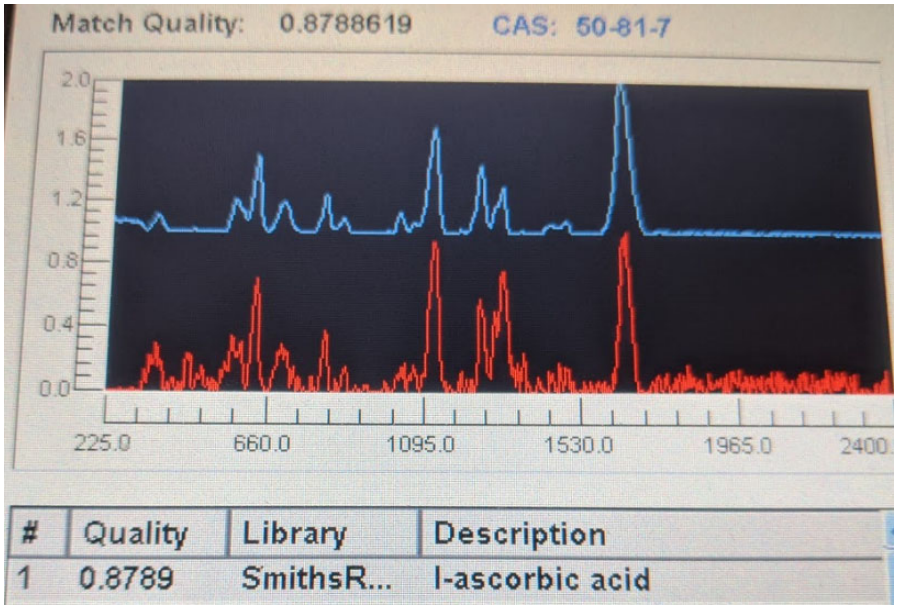
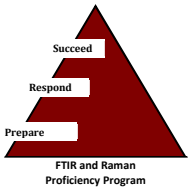


Figure 6. RAM19-9 RespondER results



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Individual results can be seen by visiting NPHL.org and logging into the FTIR/Raman participant portal. Individual result reports are no longer sent out. As always, please contact us with any questions you might have. This report will be posted on the FTIR/Raman page on nphl.org.

Sincerely,

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