

1 Article

2 **Screening Carpet Substrate Interferences in Arson**
 3 **Identification by Solid Phase Microextraction and**
 4 **Gas Chromatography-Mass Spectrometry**

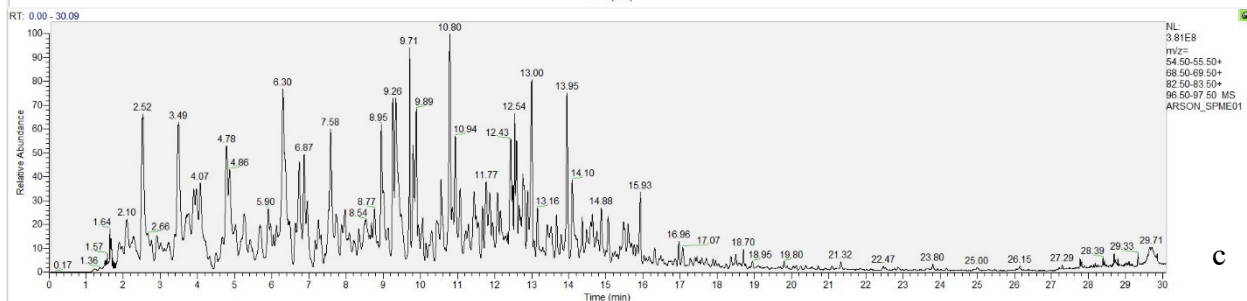
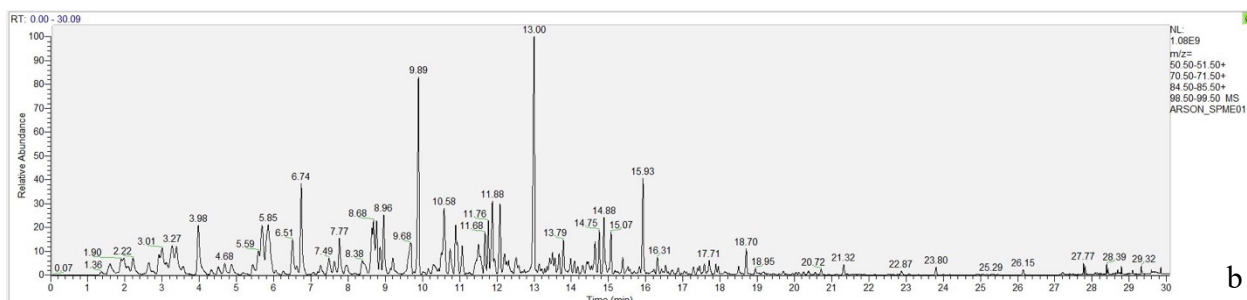
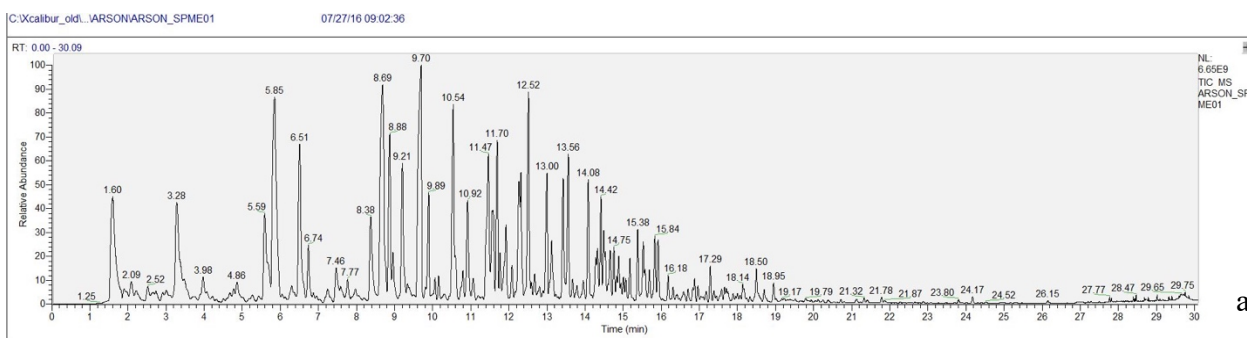
5 Alyssa Aldrich, Edna Gennarino-Lopez, Gabriel Odugbesi, Kaylandra Woodside and Shokouh
 6 Haddadi *

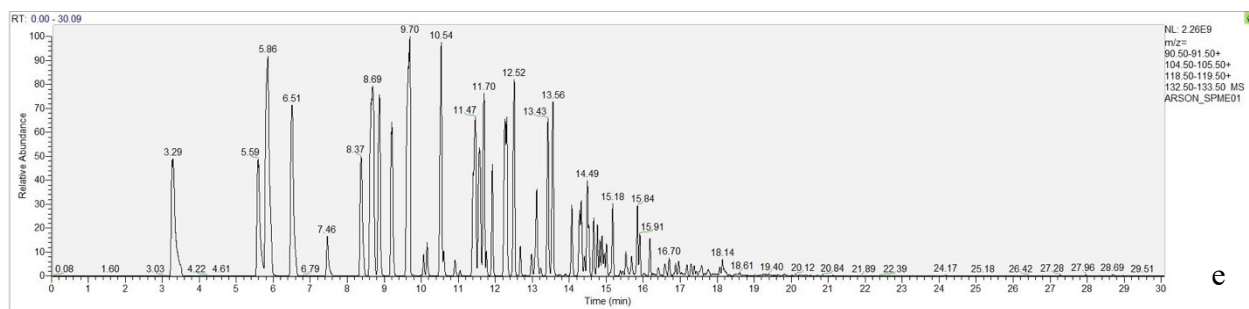
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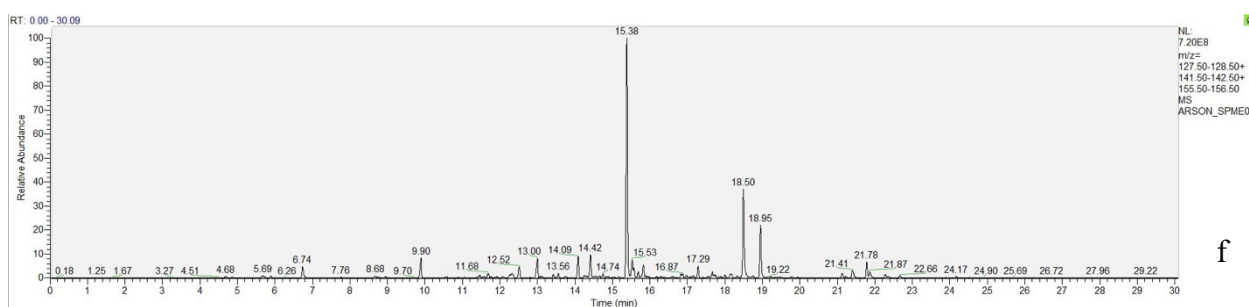
11 Received: 23 October 2020; Accepted: 16 November 2020; Published: 18 November 2020

12 **Extracted ion data for unburned neat ignitable liquids (Section 3.1)**

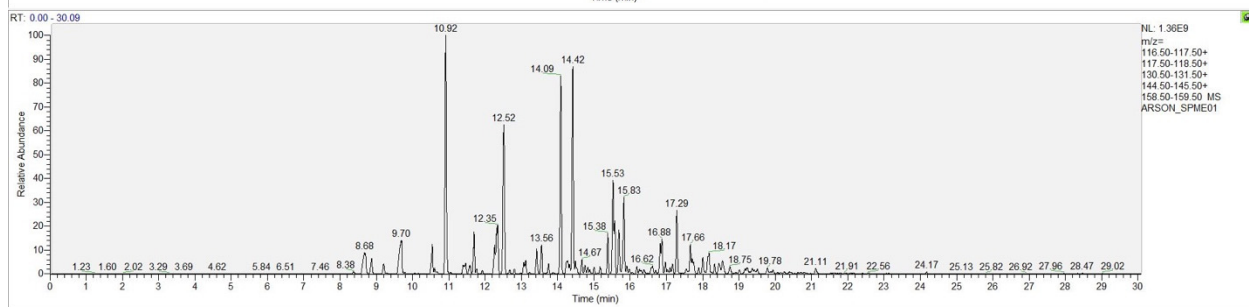




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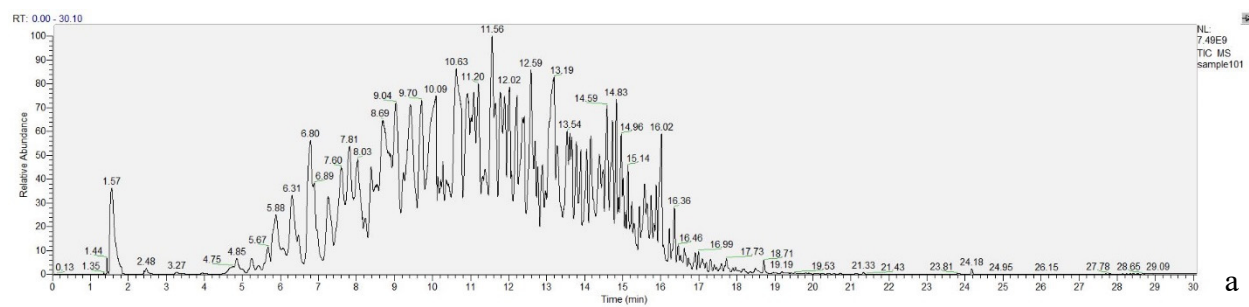
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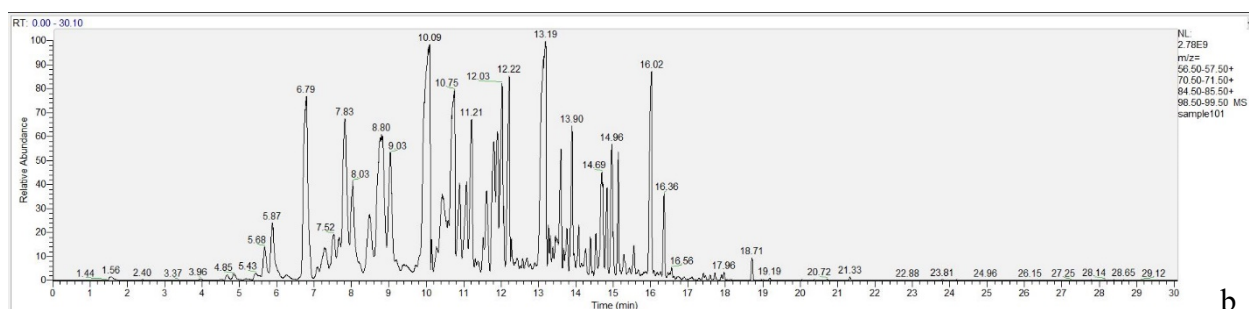
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Figure S1. GC-MS extracted ion data related to neat gasoline. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f) extracted indane profile.

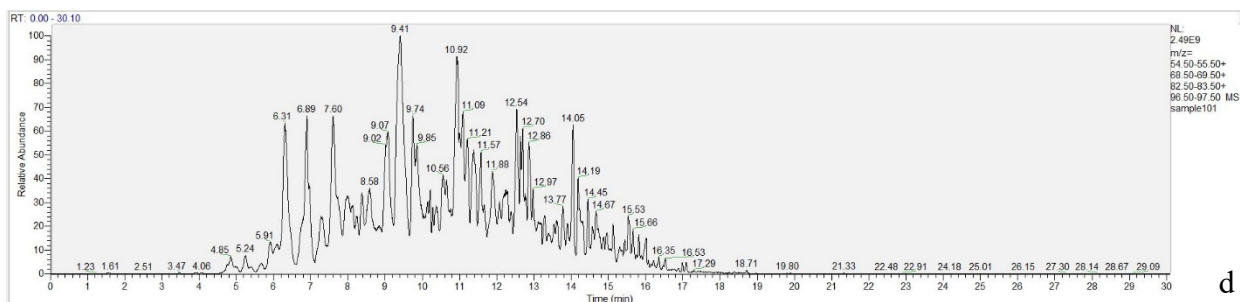


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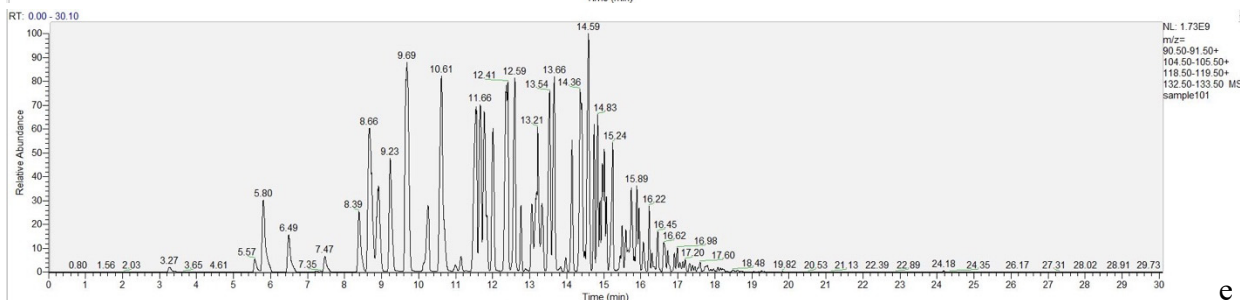
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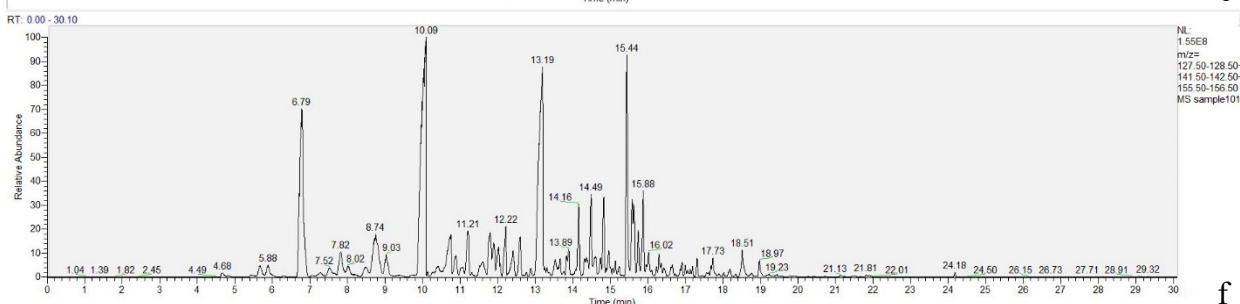
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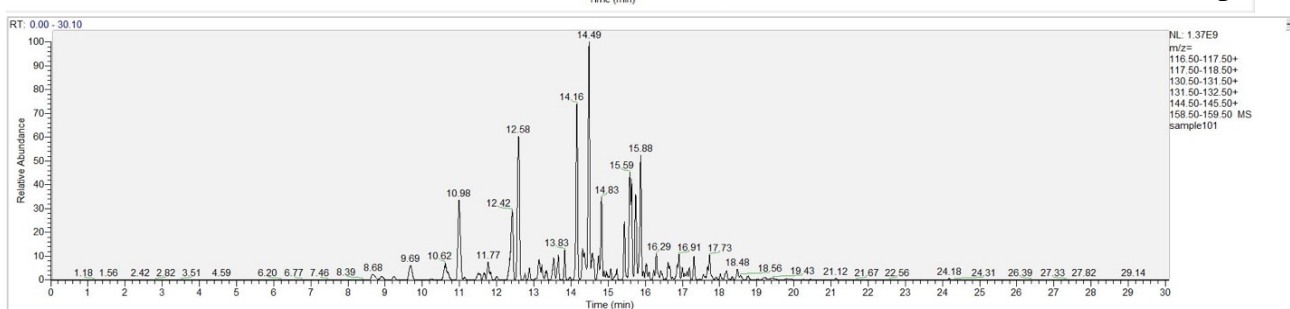
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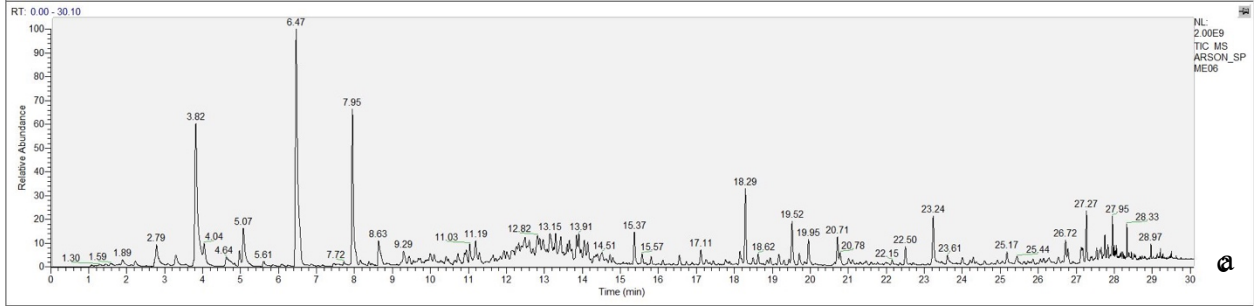
Figure S2. GC-MS extracted ion data related to neat kerosene. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f) extracted indane profile.

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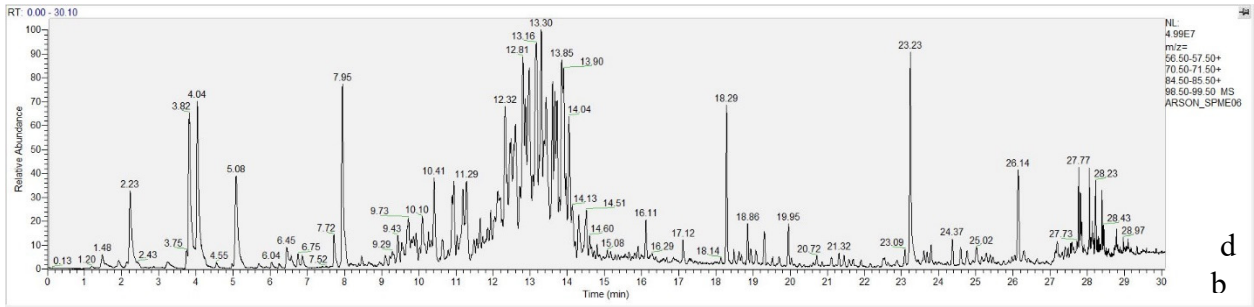
32 **Extracted ion data for carpet substrates (Section 3.2)**

33 *Extracted ion data for Carpet#1 Stain Master Pet Protect (nylon 6,6) (Section 3.2.1)*

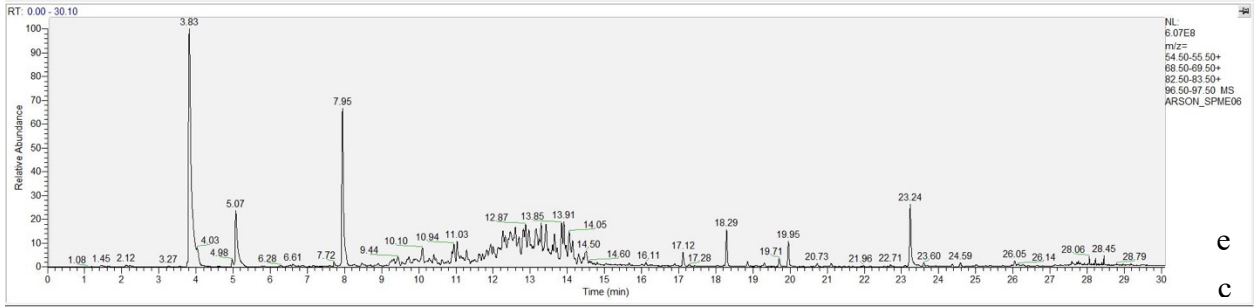
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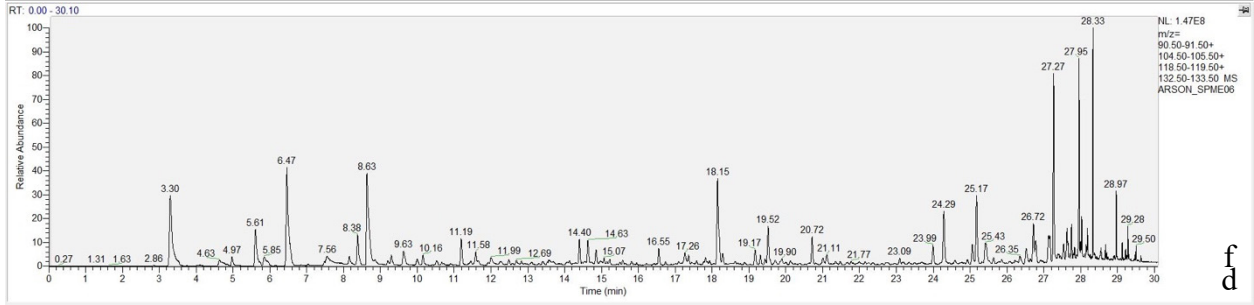
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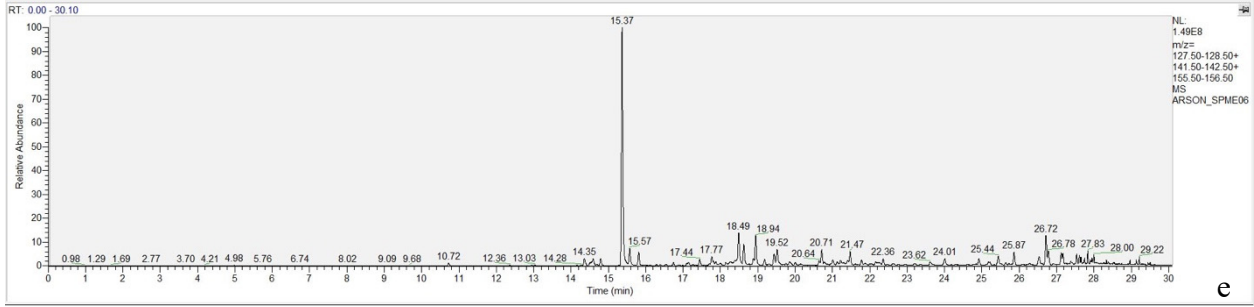
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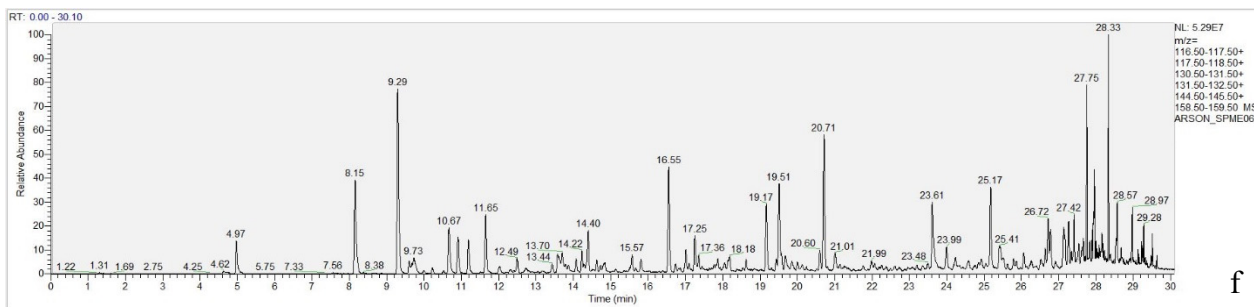
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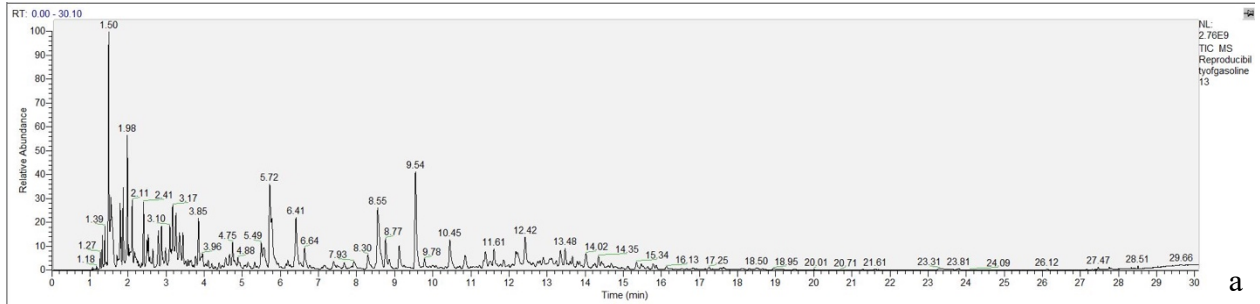
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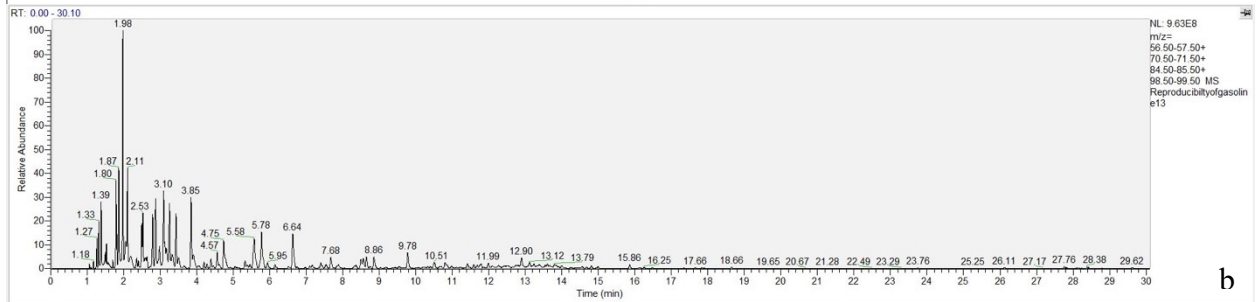
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Figure S3. GC-MS extracted ion data related to Carpet#1, Stain Master Pet Protect Dyed BCF Nylon 6,6 burned without ILs. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f) extracted indane profile.

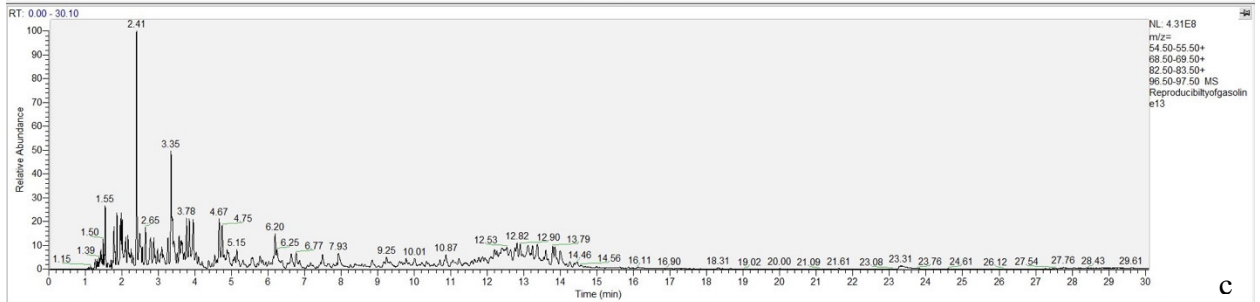
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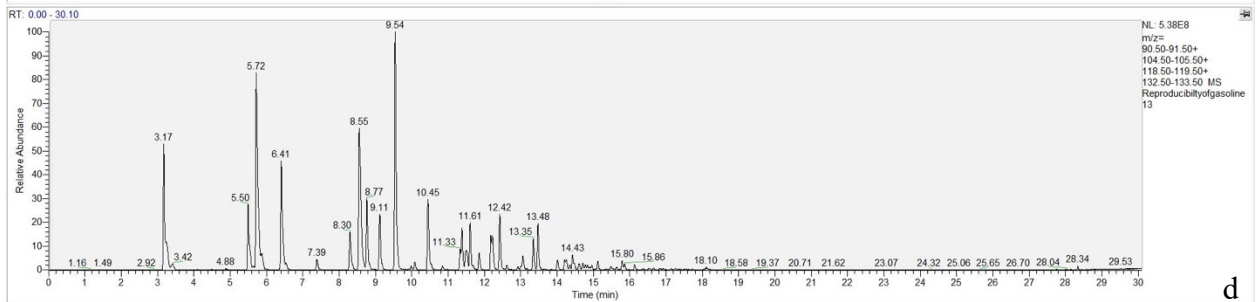
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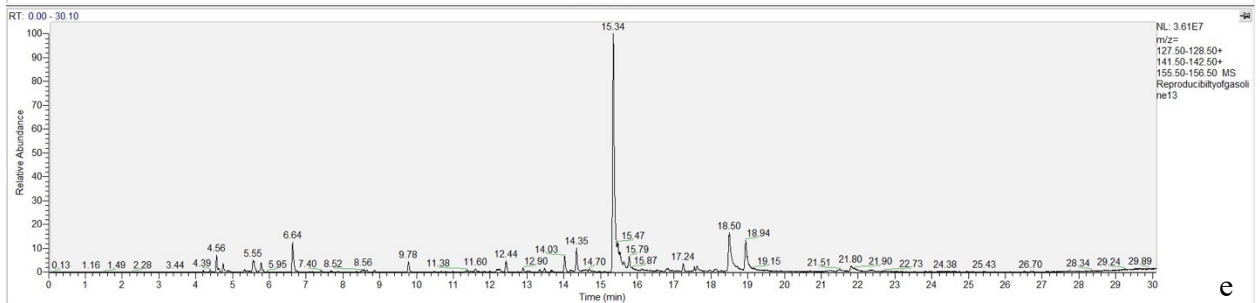
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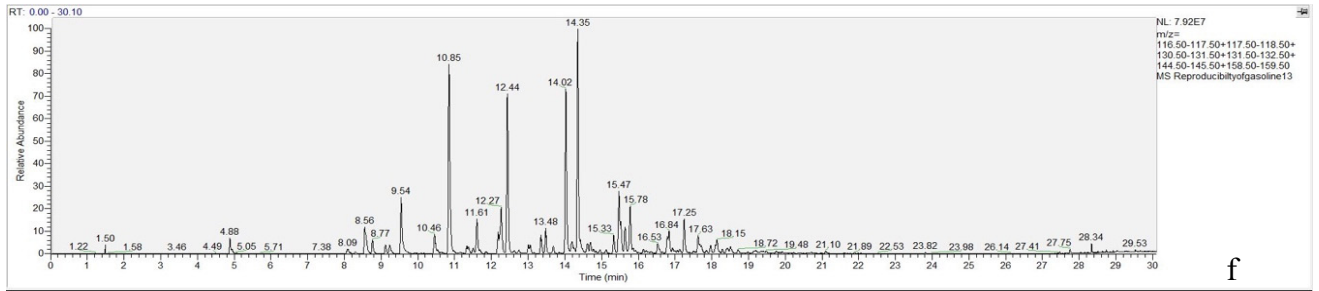


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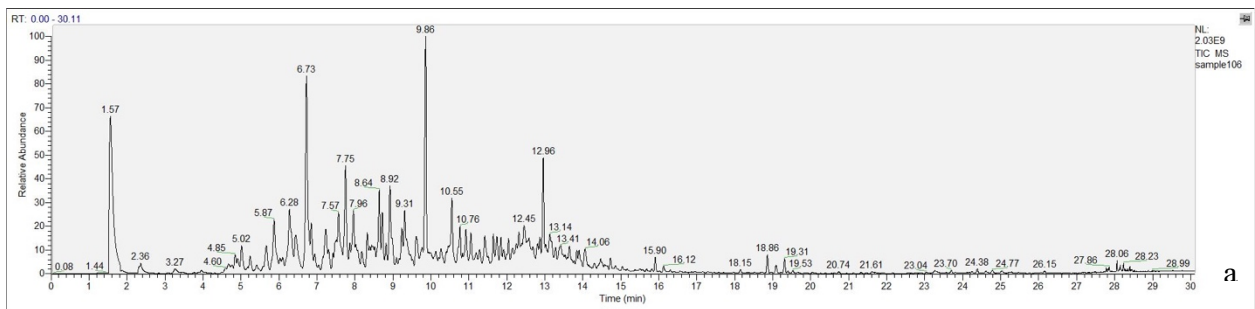
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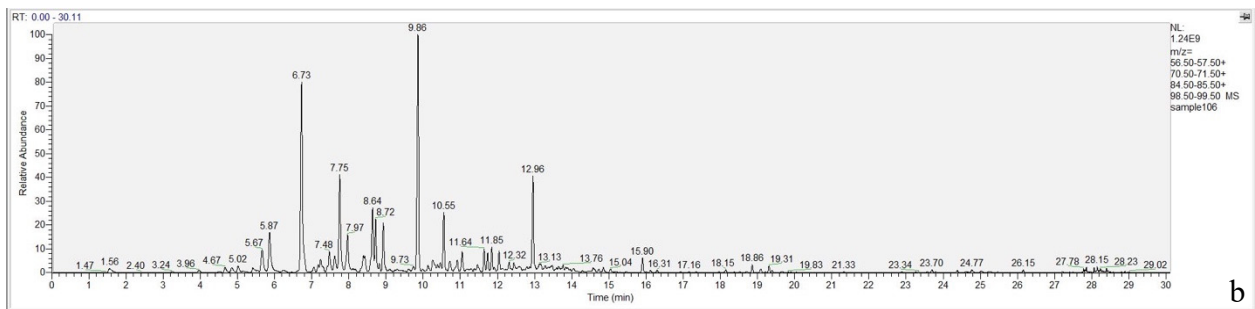
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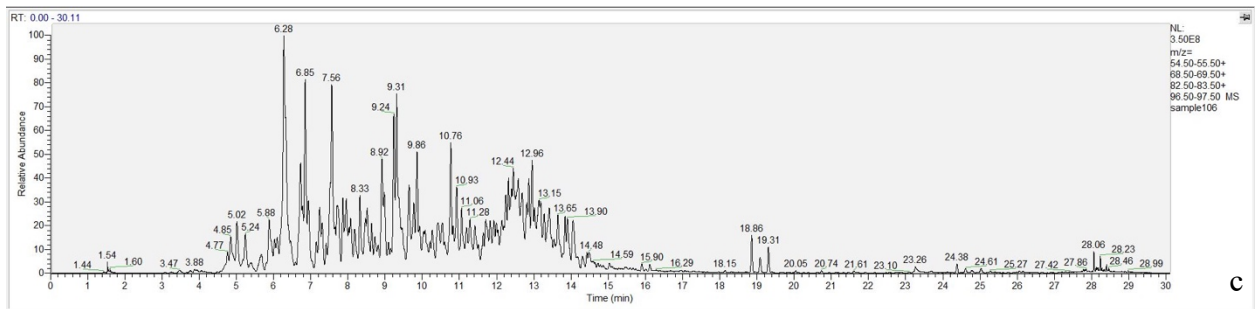
Figure S4. GC-MS extracted ion data related to Carpet#1, Stain Master Pet Protect Dyed BCF Nylon 6,6 burned with gasoline. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f) extracted indane profile.



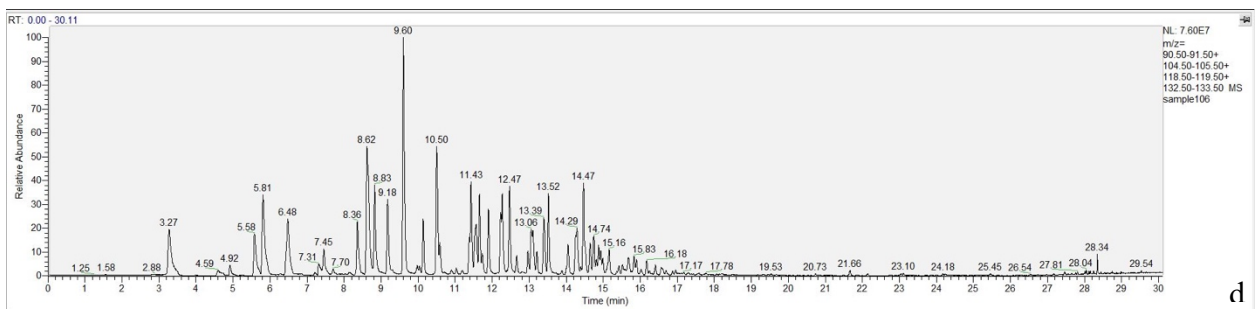
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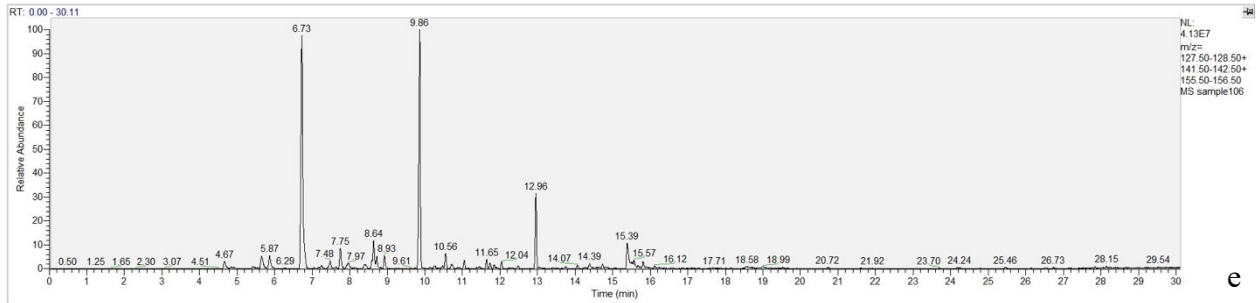


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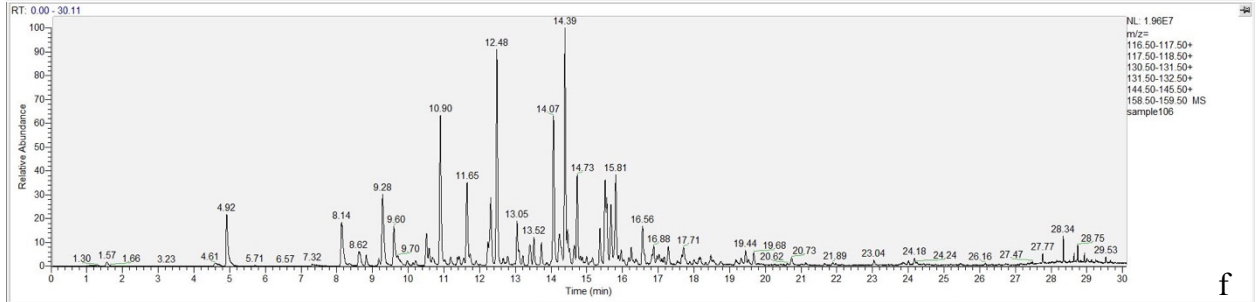


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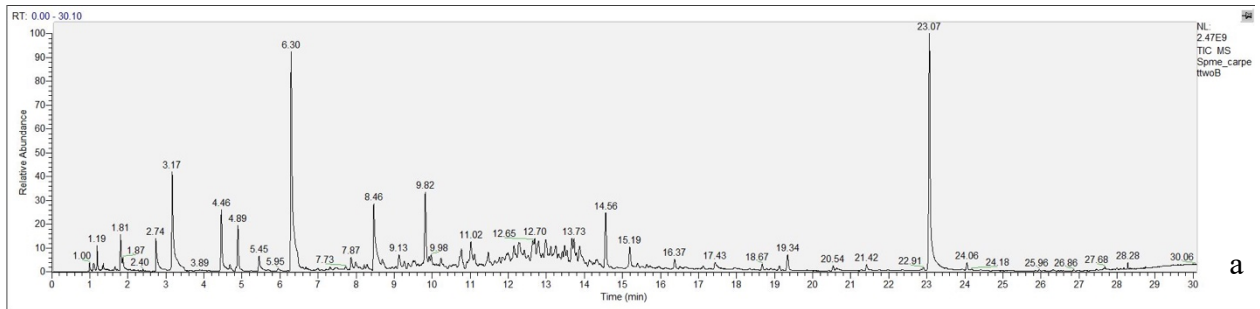
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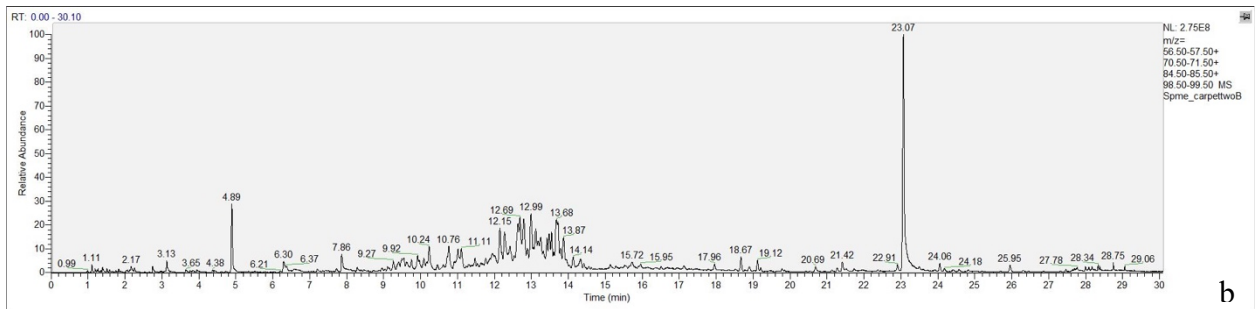
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Figure S5. GC-MS extracted ion data related to Carpet#1, Stain Master Pet Protect Dyed BCF Nylon 6,6, burned with kerosene. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f) extracted indane profile.

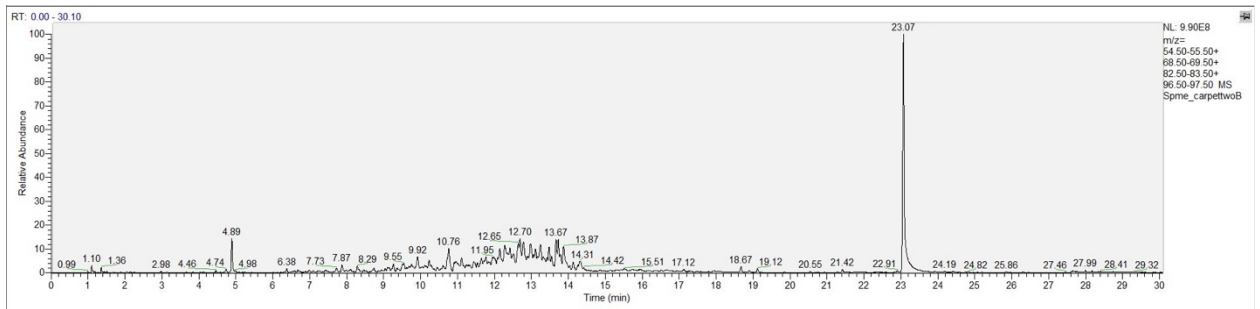
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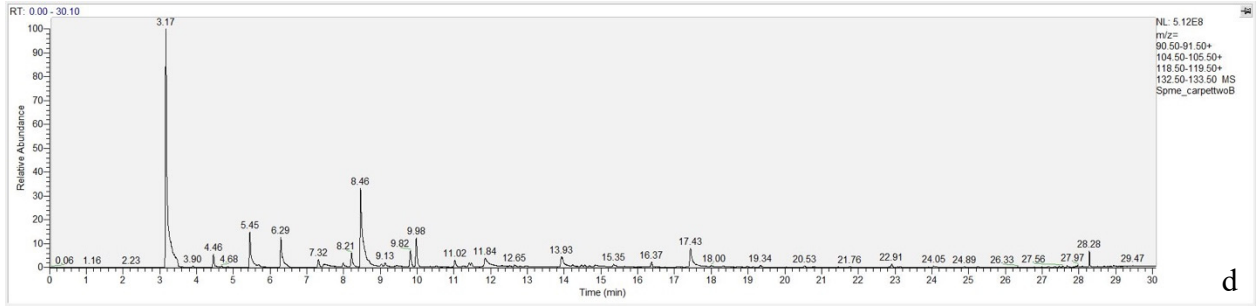


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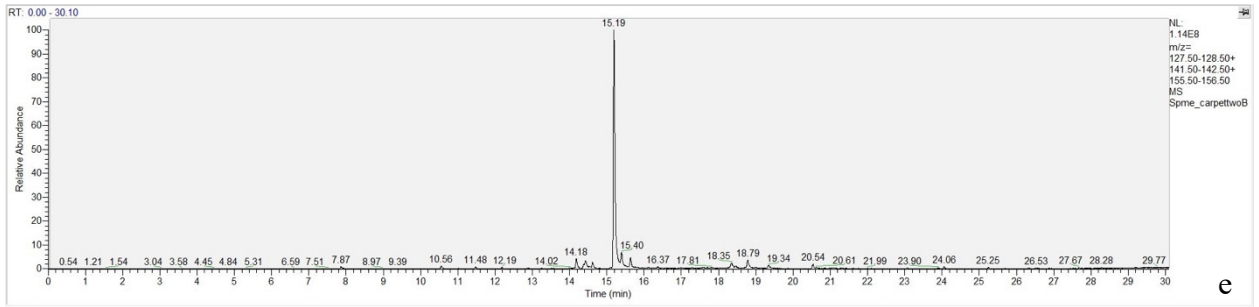


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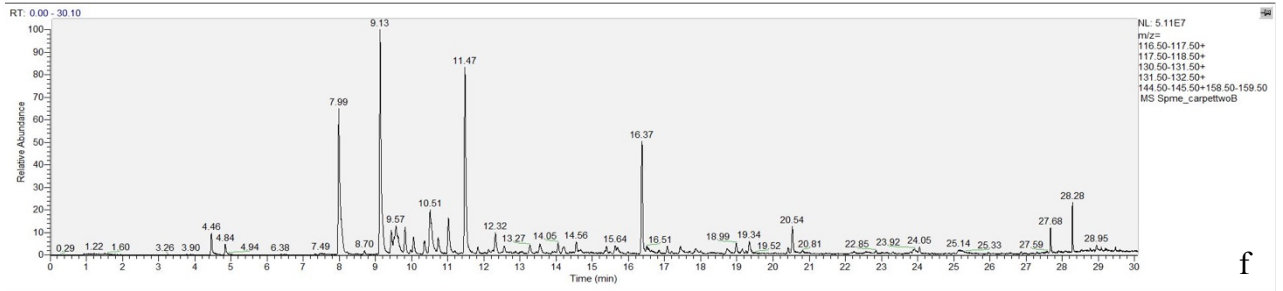
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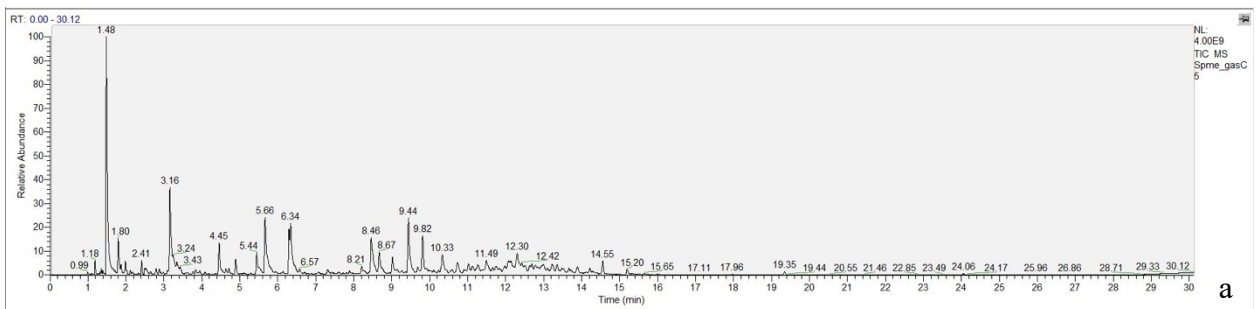
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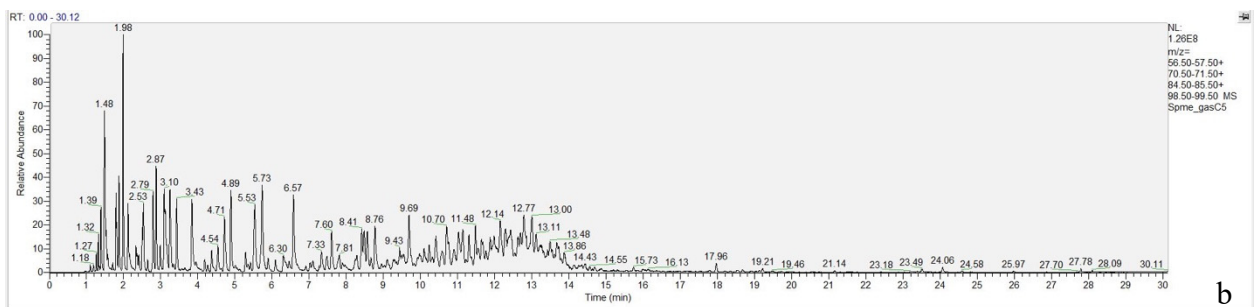
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Figure S6. GC-MS extracted ion data related to carpet#2, Stain Master Essential Carpet (polyester) burned without ILs. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f) extracted indane profile.

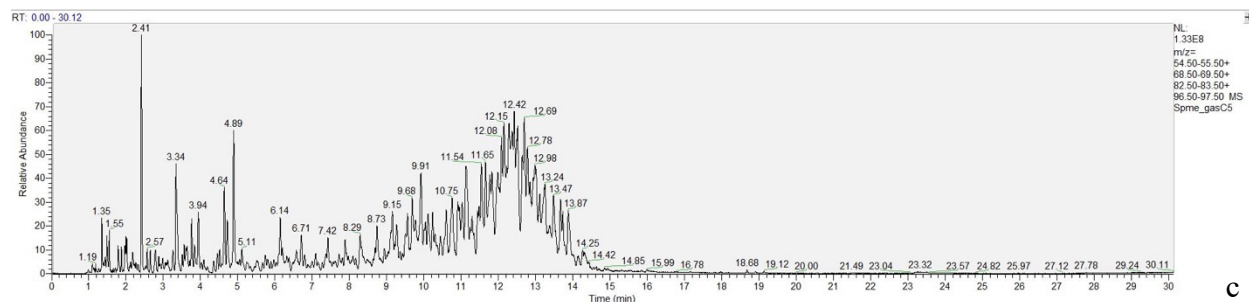
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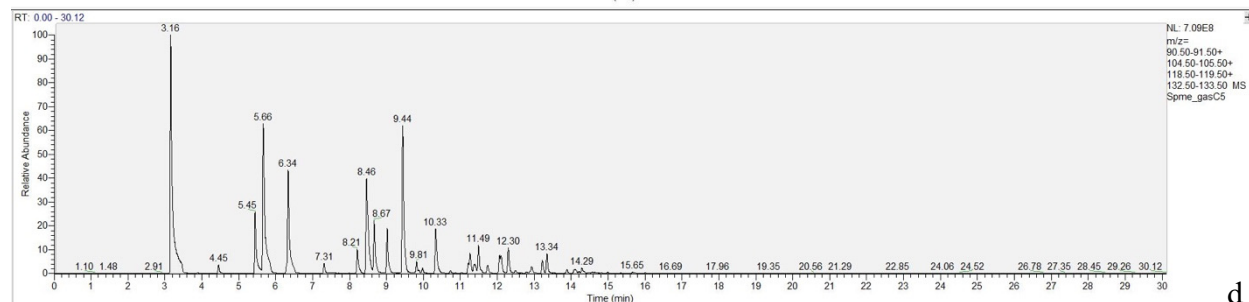
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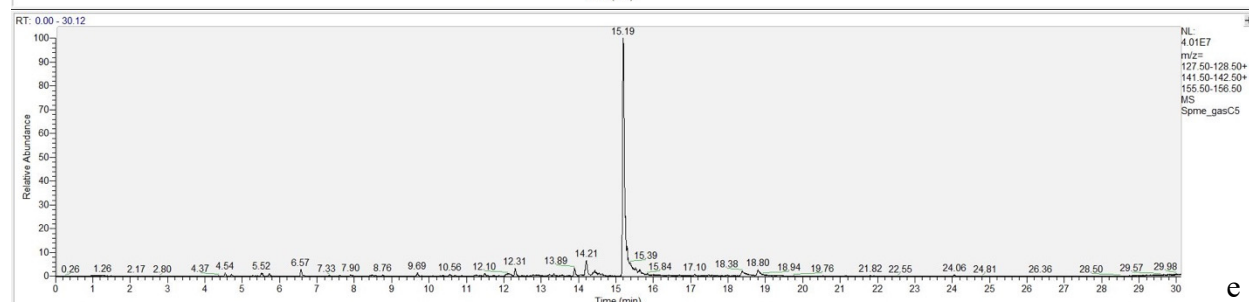
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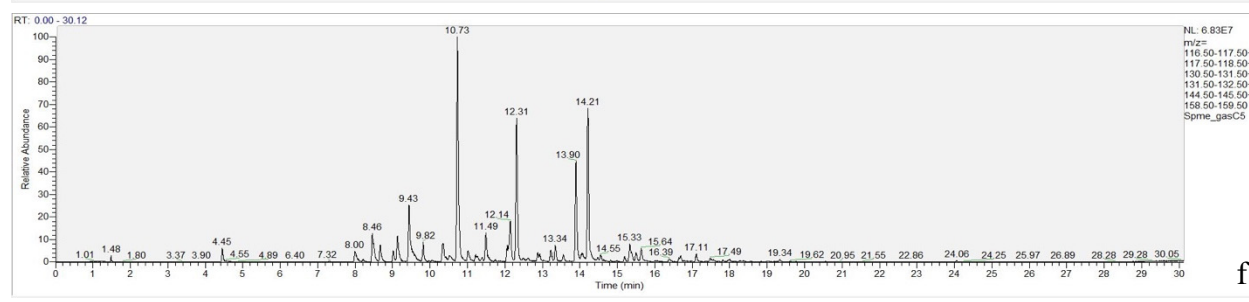
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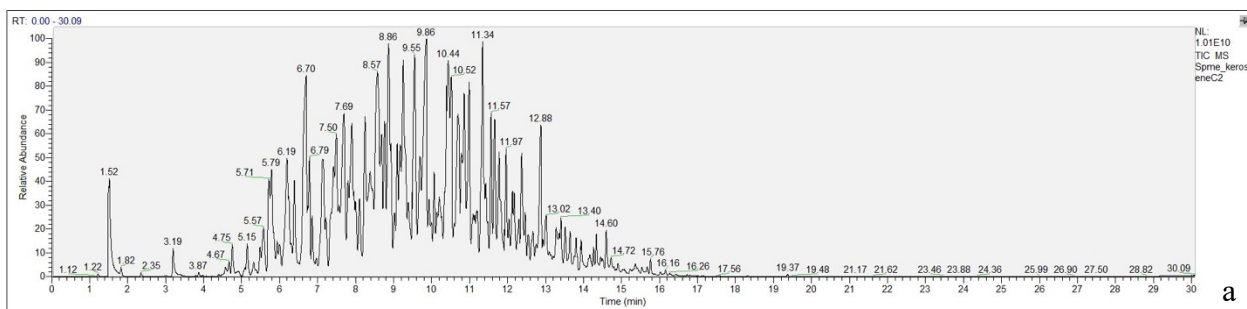


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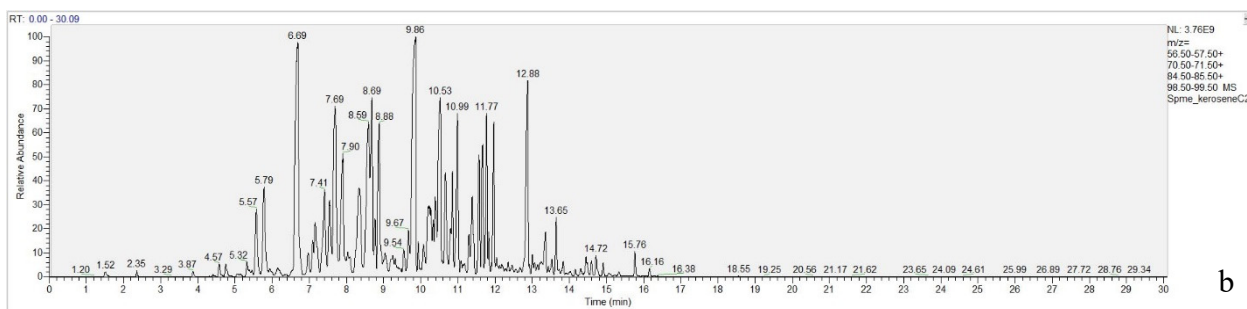


81 **Figure S7.** GC-MS extracted ion data related to carpet#2, Stain Master Essential Carpet (polyester)
 82 burned with gasoline. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted
 83 cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear
 84 aromatics profile; (f) extracted indane profile.

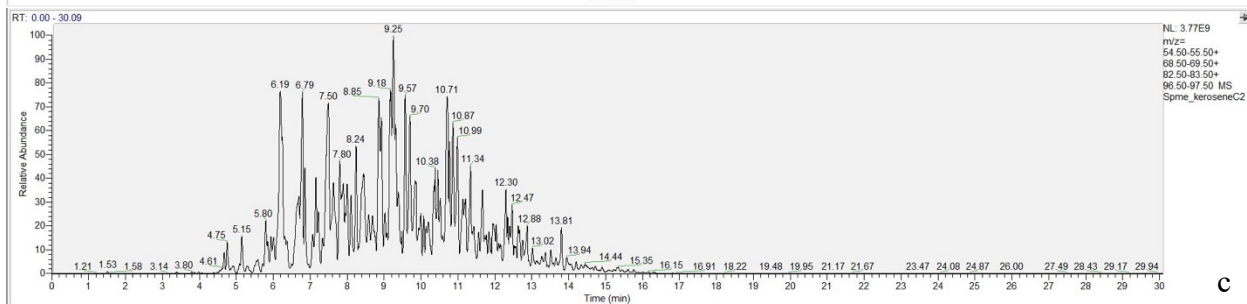
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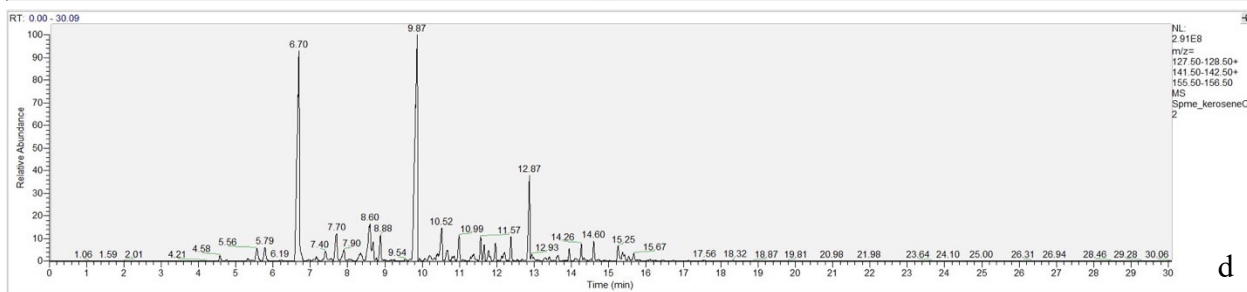
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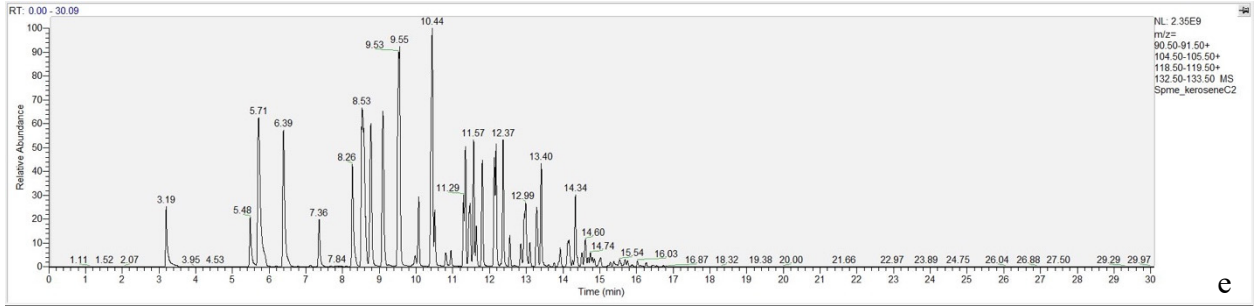
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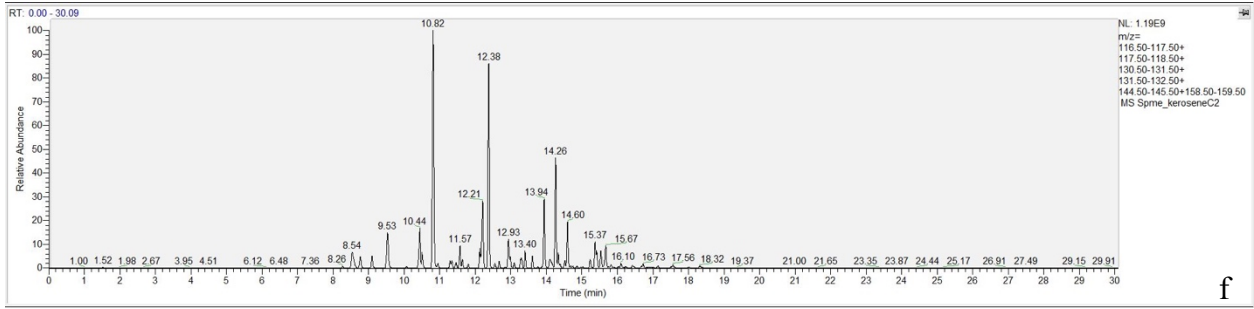
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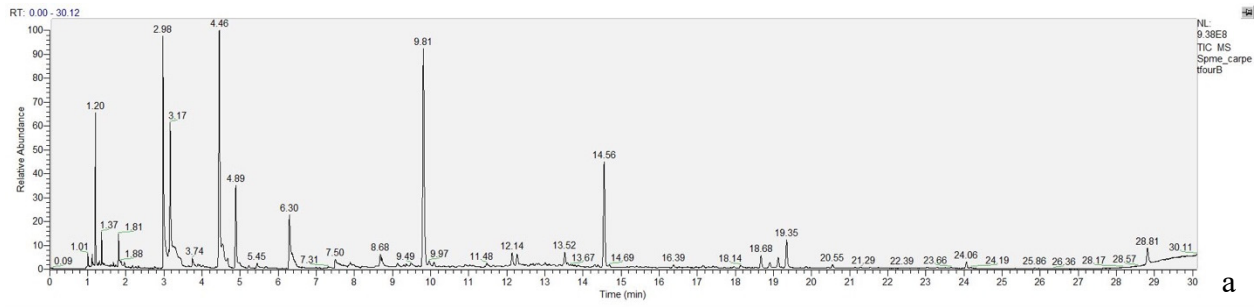
Figure S8. GC-MS extracted ion data related to carpet#2, Stain Master Essential Carpet (polyester) burned with kerosene. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f) extracted indane profile.

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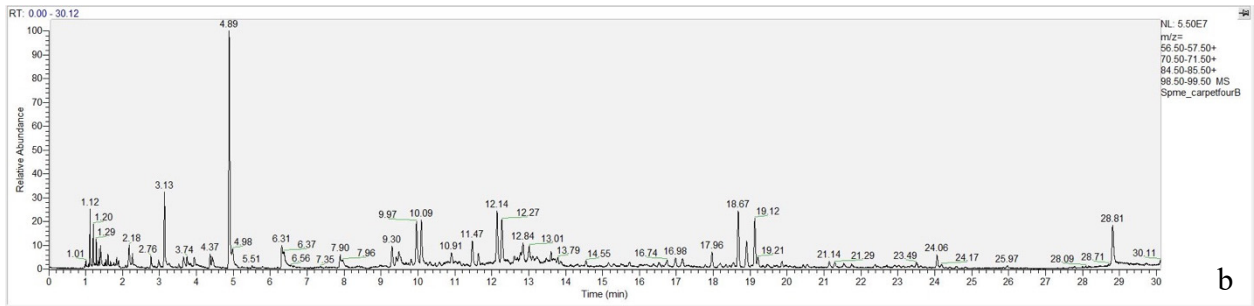
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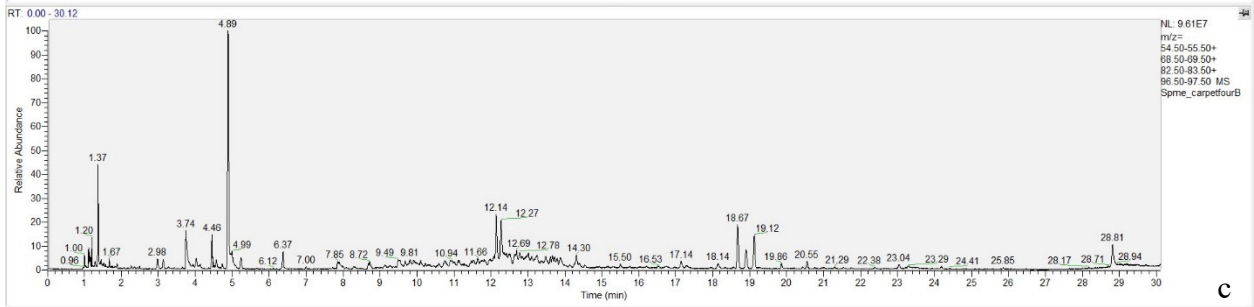
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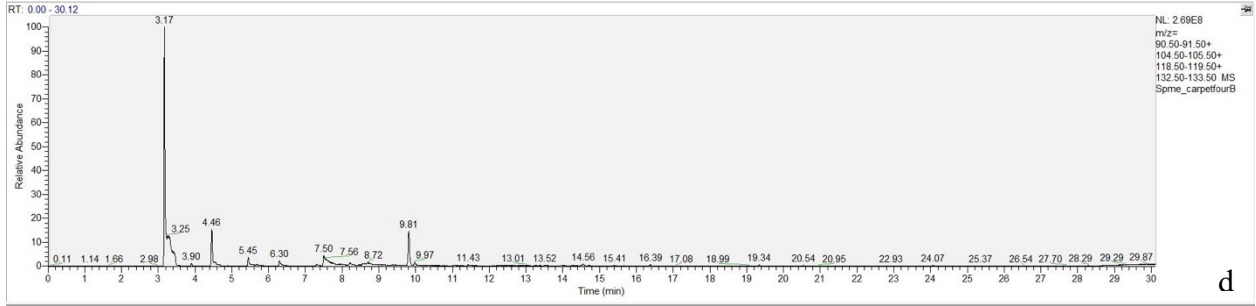
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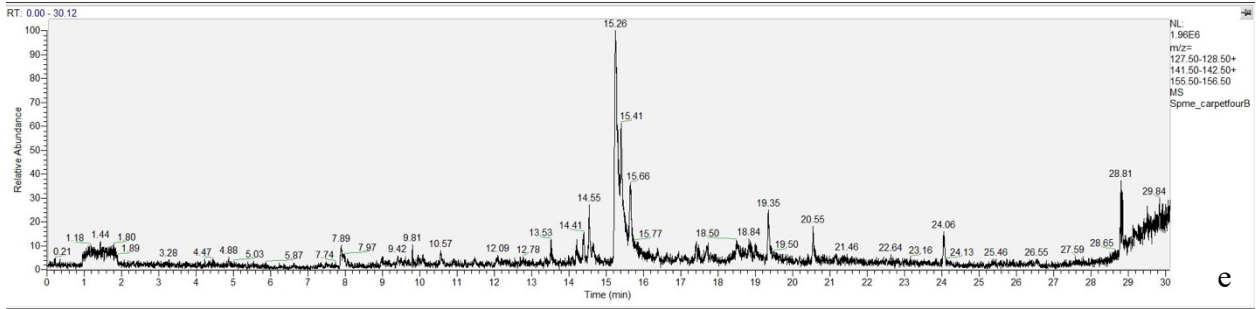


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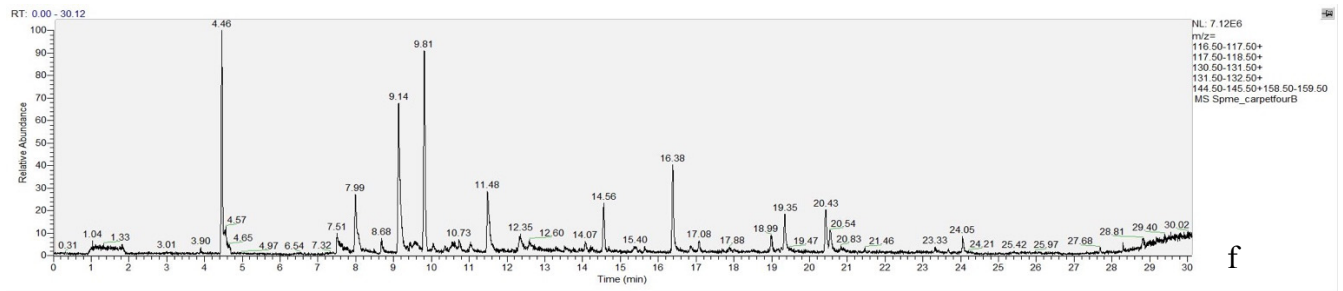
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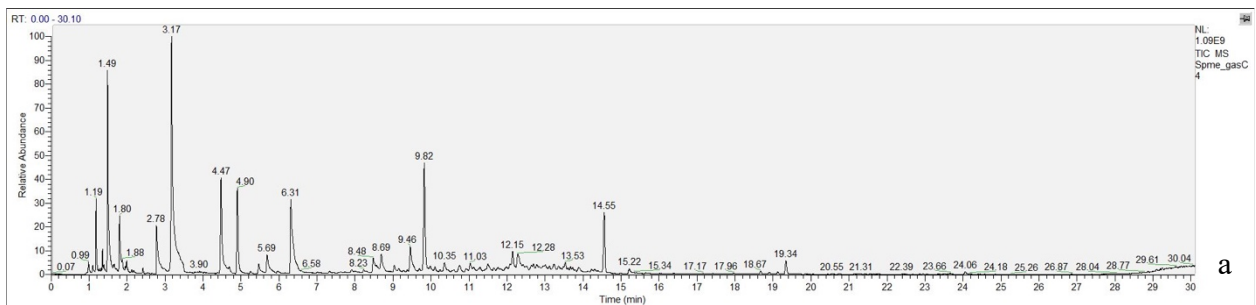


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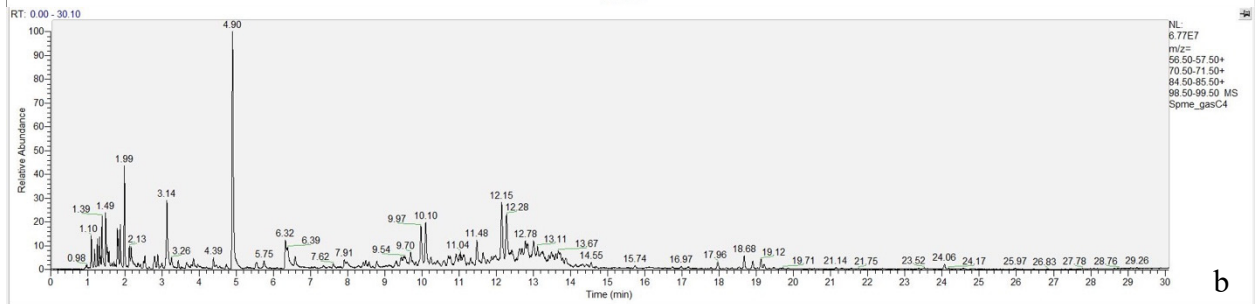
Figure S9. GC-MS extracted ion data related to carpet#3, Berber 100% Dyed Polyester Carpet burned without ILs. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f) extracted indane profile.

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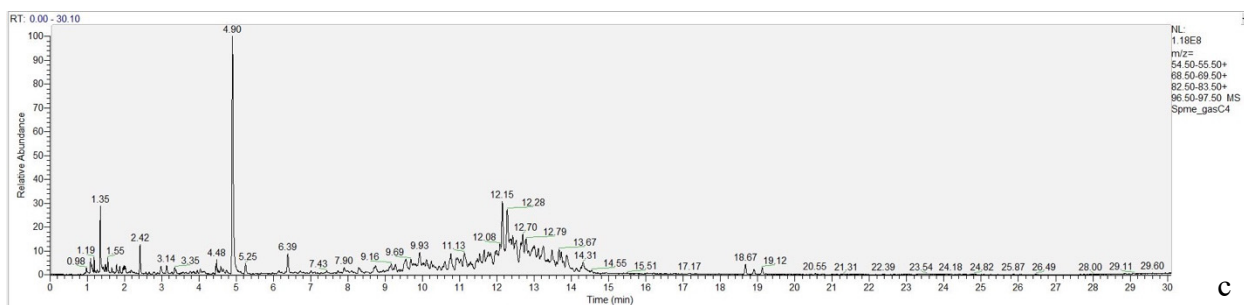
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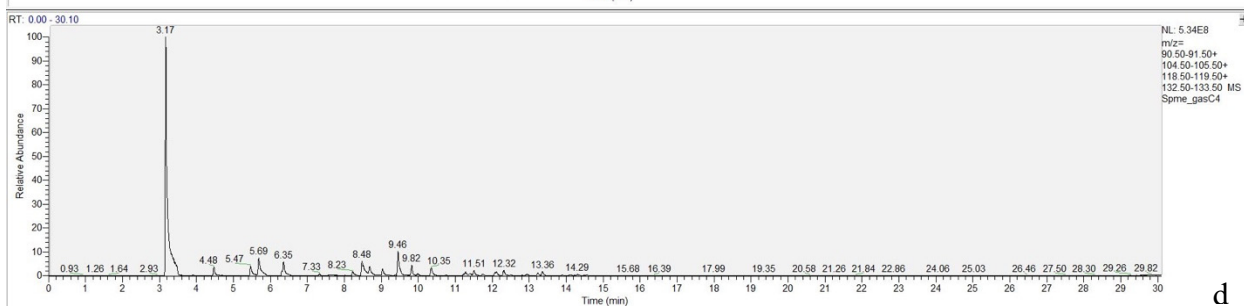


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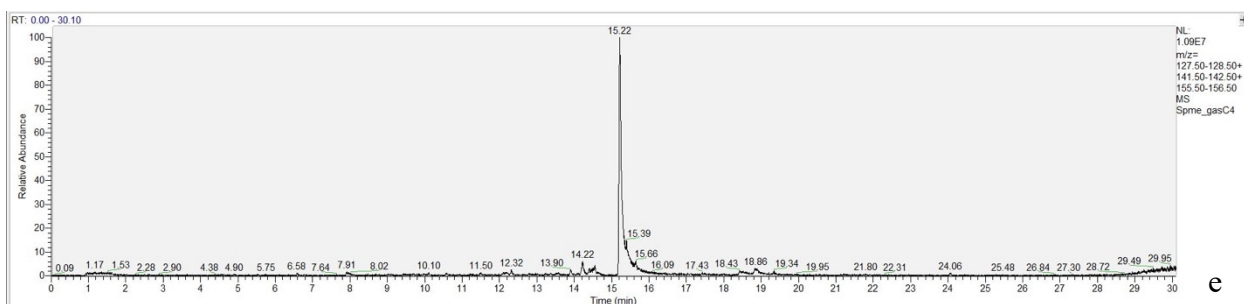
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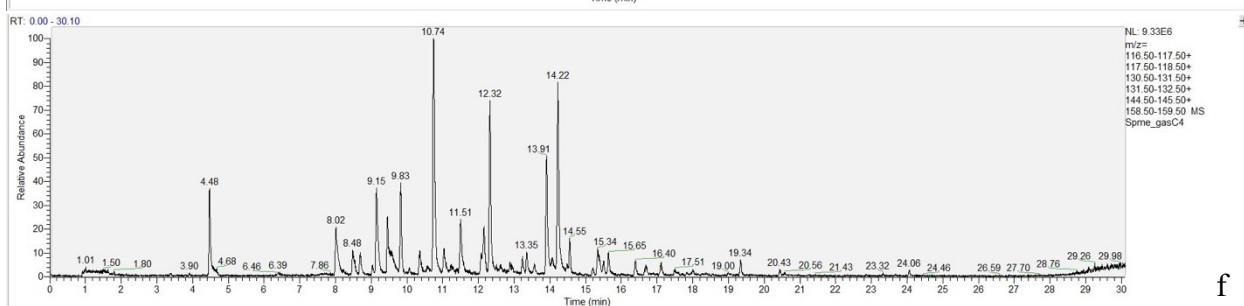
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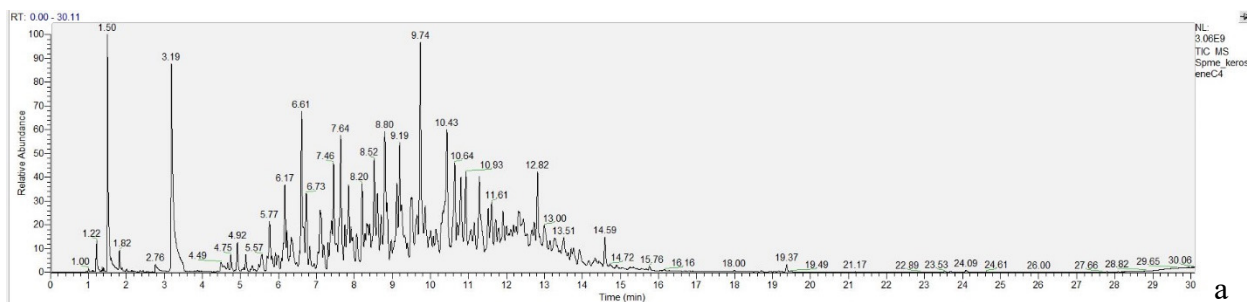


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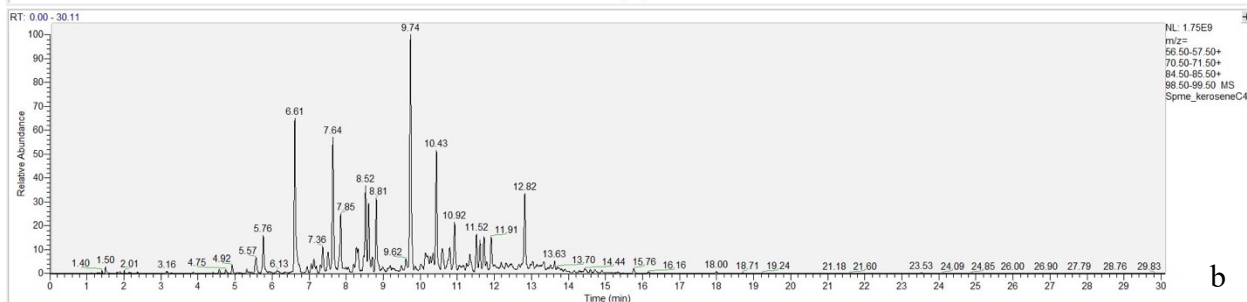


111 **Figure S10.** GC-MS extracted ion data related to carpet#3, Berber 100% Dyed Polyester Carpet burned with
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 113 alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f)
 114 extracted indane profile.

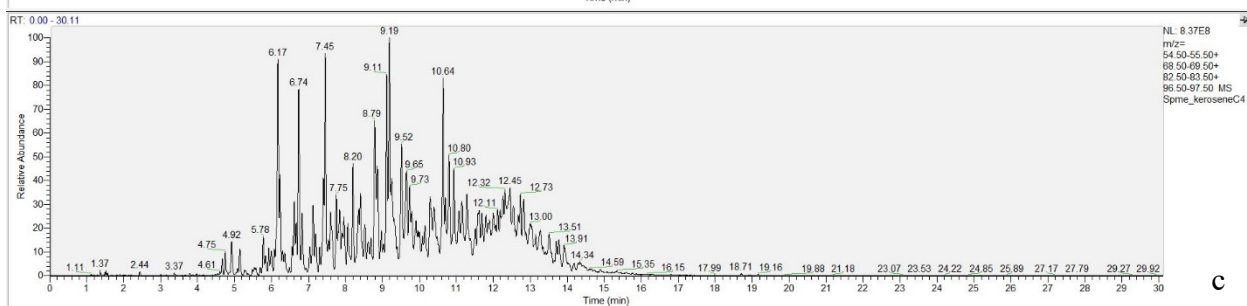
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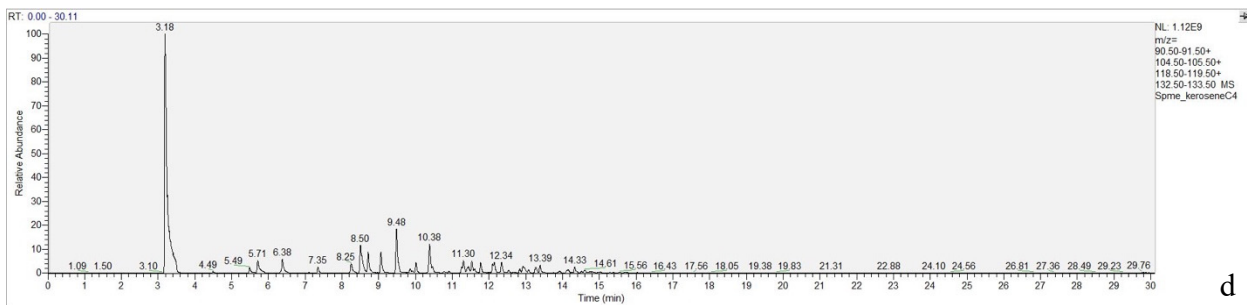
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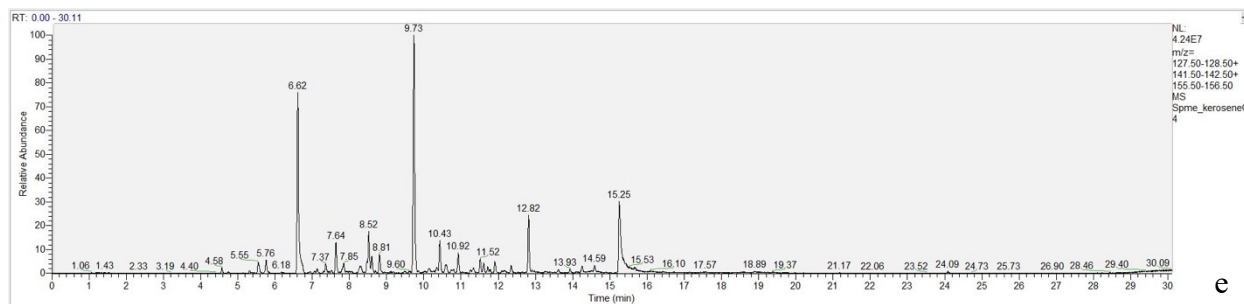
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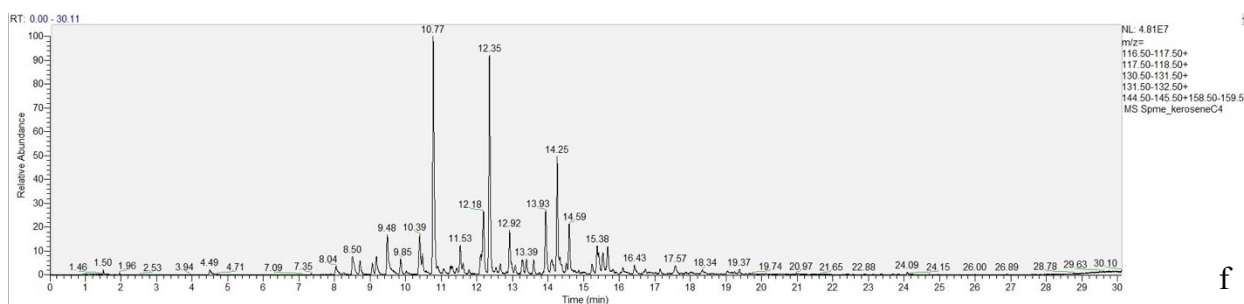
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Figure S11. GC-MS extracted ion data related to carpet#3, Berber 100% Dyed Polyester carpet burned with kerosene. (a) Total ion chromatogram; (b) extracted alkane profile; (c) extracted cycloalkanes and alkenes profile; (d) aromatics (alkylbenzenes) profile; (e) extracted polynuclear aromatics profile; (f) extracted indane profile.



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