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Electronic Supplementary Information

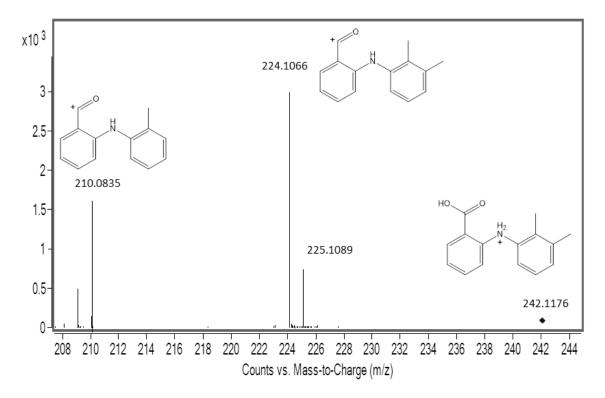
Aqueous chlorination of mefenamic acid: Kinetics, transformation byproducts and ecotoxicity assessment

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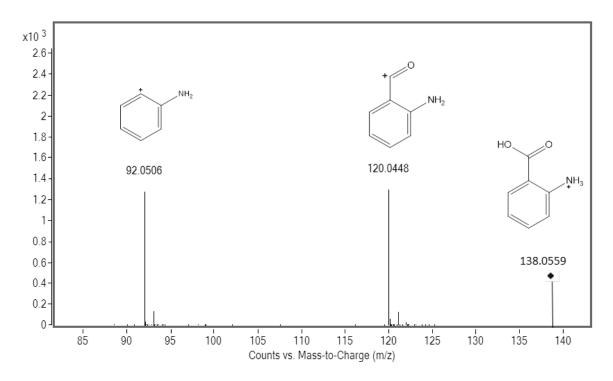
a) Mfe-242



| Measured | Calculated | Molecular | Error |
|-------------------------------|-------------------------------|------------------------------------|-------|
| $(\mathbf{M} + \mathbf{H})^+$ | $(\mathbf{M} + \mathbf{H})^+$ | formula | (ppm) |
| 224.1066 | 224.1070 | C ₁₅ H ₁₄ NO | 1.75 |
| 210.0835 | 210.0913 | $C_{14}H_{12}NO$ | 37.13 |

Fig. S1MS/MS spectrum for chlorination Mfe and its fragmentation by-products.

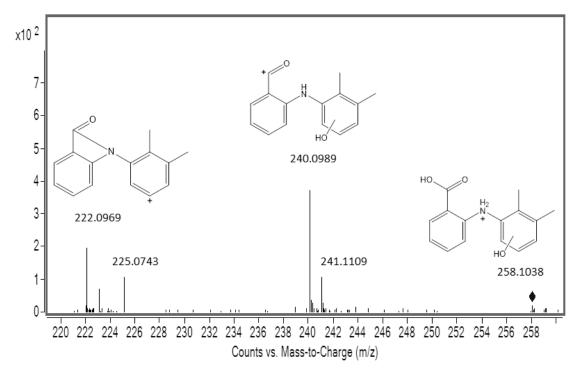
b) Mfe-138



| Measured | Calculated | Molecular formula | Error |
|-------------------------------|-----------------------------|----------------------------------|--------|
| $(\mathbf{M} + \mathbf{H})^+$ | $(\mathbf{M}+\mathbf{H})^+$ | | (ppm) |
| 120.0448 | 120.0444 | C ₇ H ₆ NO | -3.8 |
| 92.0506 | 92.0495 | C_6H_6N | -11.74 |

Fig. S1 (continued)

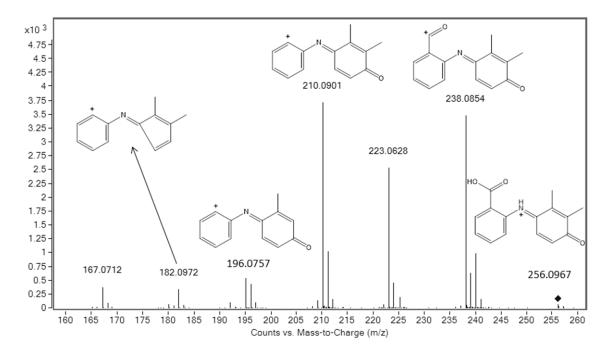
c) Mfe-258



| Measured | Calculated | Molecular | Error (ppm) |
|-----------|-----------------------------|---|-------------|
| $(M+H)^+$ | $(\mathbf{M}+\mathbf{H})^+$ | formula | |
| 240.0989 | 240.1019 | C ₁₅ H ₁₄ NO ₂ | 12.44 |
| 222.0969 | 222.0913 | $C_{15}H_{12}NO$ | -25.07 |

Fig. S1 (continued)

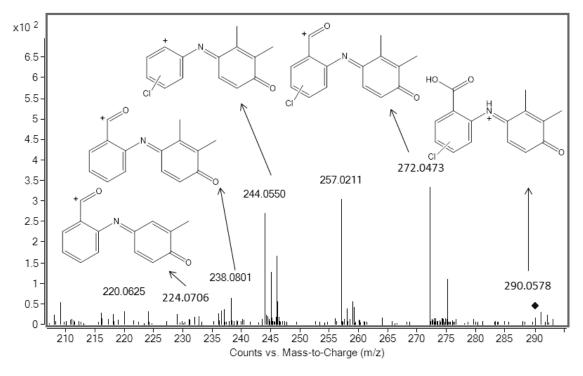
d) Mfe- 256



| Measured | Calculated | Molecular | Error |
|-----------------------------|-------------------------------|---|-------|
| $(\mathbf{M}+\mathbf{H})^+$ | $(\mathbf{M} + \mathbf{H})^+$ | formula | (ppm) |
| 238.0854 | 238.0863 | C ₁₅ H ₁₂ NO ₂ | 3.77 |
| 210.0901 | 210.0913 | $C_{14}H_{12}NO$ | 5.74 |
| 196.0757 | 196.0757 | $C_{13}H_{10}NO$ | 12.11 |
| 182.0972 | 182.0964 | $C_{13}H_{12}N$ | -4.26 |

Fig. S1 (continued)

e) Mfe-290



| Measured | Calculated | Molecular | Error |
|-------------------------------|-----------------------------|--------------------------------------|--------|
| $(\mathbf{M} + \mathbf{H})^+$ | $(\mathbf{M}+\mathbf{H})^+$ | formula | (ppm) |
| 272.0473 | 272.0473 | $C_{15}H_{11}CINO_2$ | 2.47 |
| 244.0550 | 244.0524 | C ₁₄ H ₁₁ ClNO | -10.72 |
| 238.0801 | 238.0863 | $C_{15}H_{12}NO_2$ | 25.71 |
| 224.0706 | 224.0706 | $C_{14}H_{10}NO_2 \\$ | -22.43 |

Fig. S1 (continued)