

**BfR**

Risiken erkennen – Gesundheit schützen

MS/MS Parameters of Pesticides

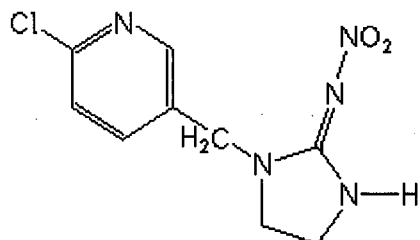
Analyte: Imidacloprid

CAS No.: 138261-41-3

Formula: C₉H₁₀ClN₅O₂

Molecular mass (lowest isotopes): 255,05 amu

Structure:



Ionisation: ESI +

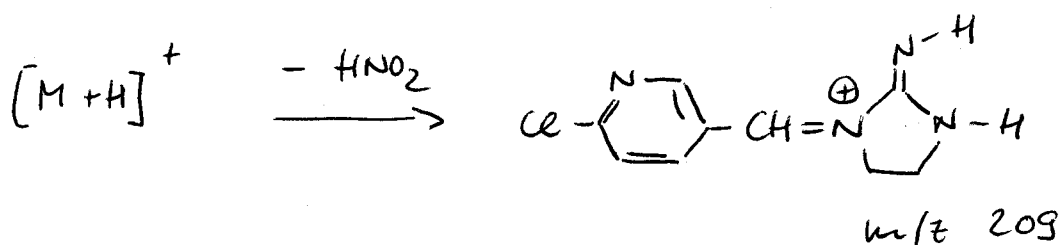
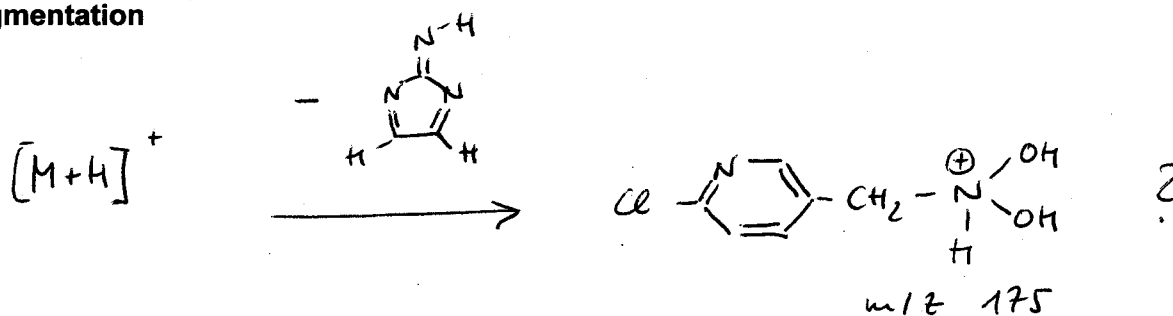
Quasimolecular ion: 256,1 amu = [M+H]⁺

Analyte sensitive parameter set (API 2000)

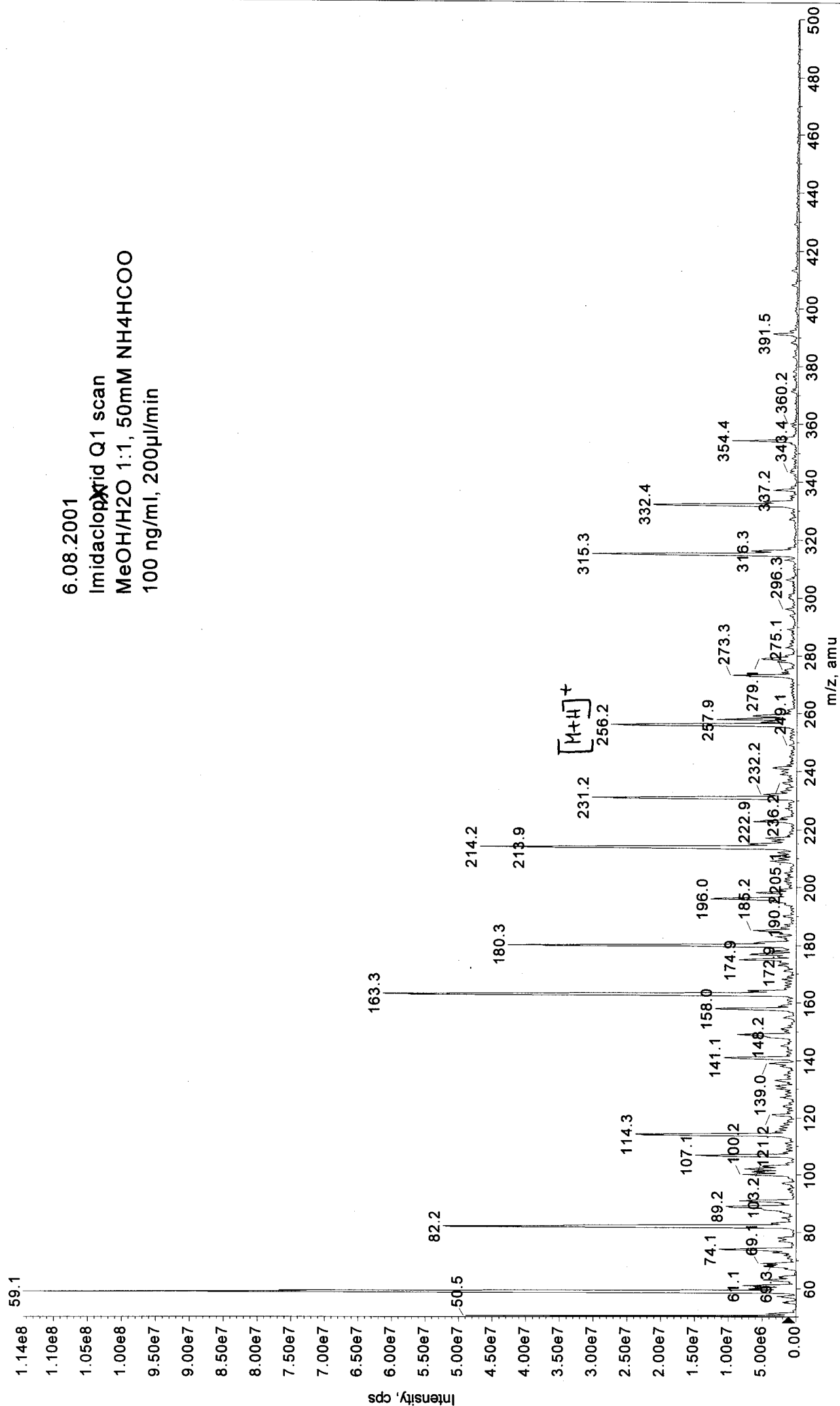
Transition	256,1 → 175,0	256,1 → 208,9
Declustering potential (DP) ^{*)}	49 V	49 V
Focusing potential (FP)	360 V	360 V
Entrance potential (EP)	9,0 V	9,0 V
Collision cell entrance potential (CEP)	16 V	14 V
Collision energy (CE)	25 V	21 V
Collision cell exit potential (CXP)	8 V	10 V

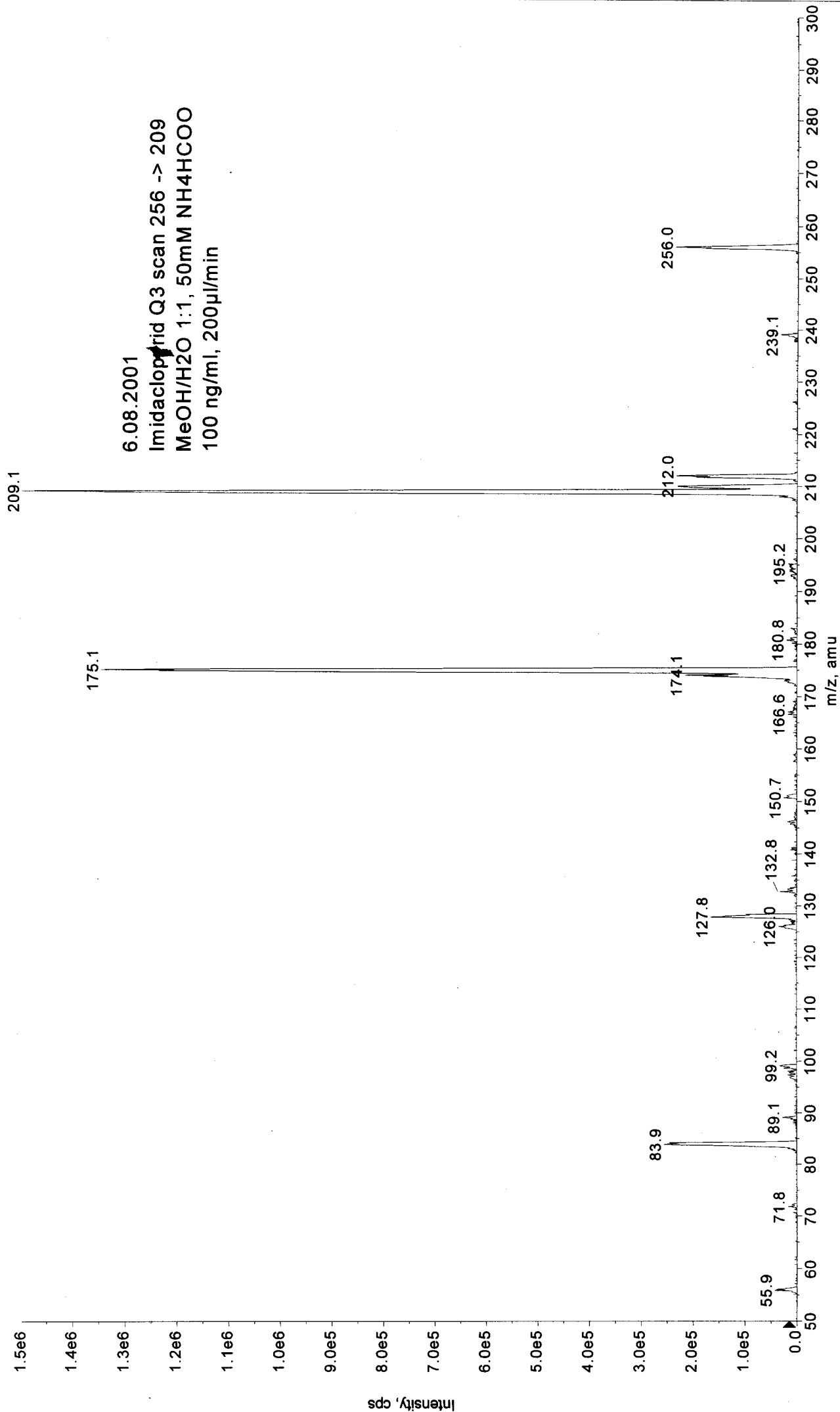
^{*)} For API 3000 and 4000 enhance DP by 20V

Fragmentation



6.08.2001
Imidacloprid Q1 scan
MeOH/H₂O 1:1, 50mM NH₄HCOO
100 ng/ml, 200µl/min





6.08.2001
Imidacloprid175 Q3 scan 256 -> 175
MeOH/H2O 1:1, 50mM NH4HCOO
100 ng/ml, 200µl/min

