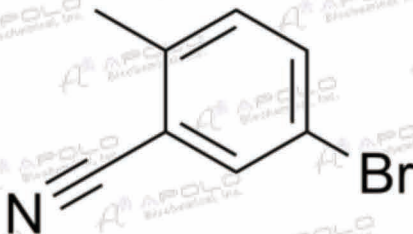


## CERTIFICATE OF ANALYSIS

**Product Name:** 5-Bromo-2-methylbenzonitrile

**Chemical Structure:**



**Lot Number:** 233434CSW007610

**CAT Number:** APL-1560015

**CAS Registry Number:** 156001-51-3

**Manufacture Date:** 09/2021

**Expiry Date:** 09/2023

**Molecular Formula:** C<sub>8</sub>H<sub>6</sub>BrN

**Molecular Weight:** 196.04

**Storage:** RT

## Analysis Data

| Item             | Specification              | Results  |
|------------------|----------------------------|----------|
| Appearance       | White to off-white (Solid) | Conforms |
| 1 H NMR Spectrum | Consistent with structure  | Conforms |
| Purity (HPLC)    | ≥ 99.00 %                  | 99.85 %  |
| Water (KF)       | ≤ 0.1 %                    | 0.053 %  |

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

**Jennifer LaBrecque 10/2021**  
Quality Assurance Manager

**Conclusion:** The above product meets the specifications of APOL

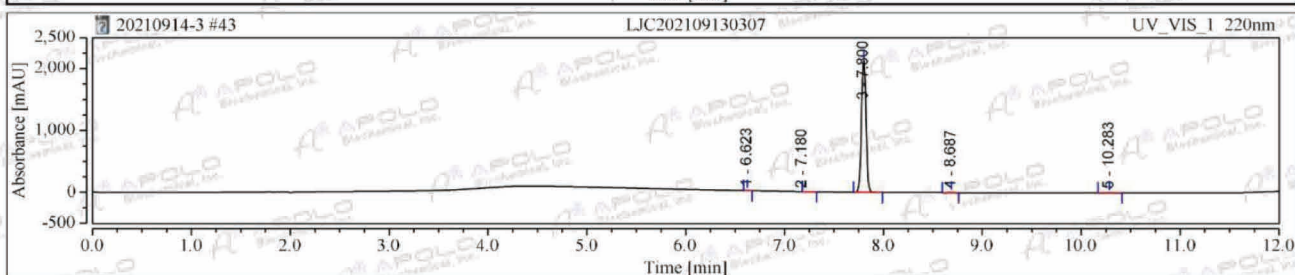
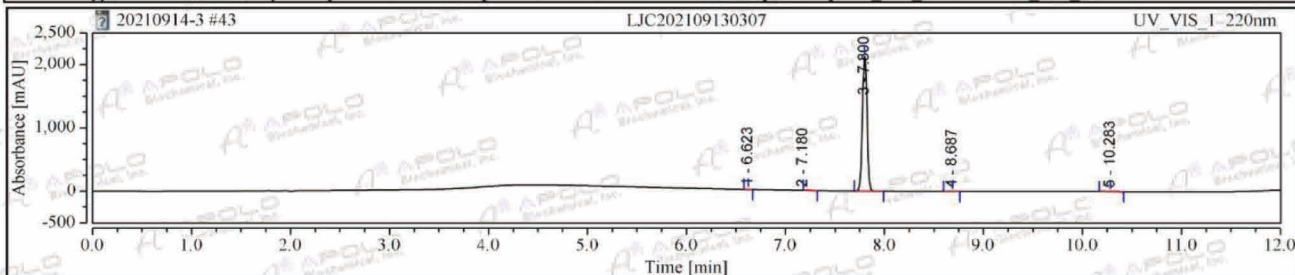
CAS NO.: 156001-51-3

## Chromatogram and Results

Injection Name: LJC202109130307  
Vial Number: RB5  
Injection Type: Unknown  
Instrument: AHC003  
Instrument Method: 10-80A-12min  
Processing Method: PM-130307  
seq.creation\_operator: Azhangy1  
Comment: 2021091398844 ARP-201904

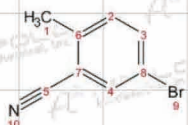
Channel: UV\_VIS\_1  
Wavelength: 220.0  
Injection Volume: 5.00  
Injection Time: 14/09/2021 19:48  
InstMeth.creation\_time: 11/05/2020 13:41  
Last update\_time: 15/09/2021 16:15  
Data Operator: Azhangy1  
Print Operator: Azhangy1

chrom://ahvy-cm7/CM7DATA/Leyan/Sequence/AHC003/Sequence/2021/202109/20210914-3.seq/767.smp/UV\_VIS\_1.channel/UV\_VIS\_1.chm



| No.    | Retention Time<br>min | Area<br>mAU*min | Height<br>mAU | Plates (USP) | Resolution (USP) | Asymmetry (USP) | Rel.Area<br>% | Peak Name |
|--------|-----------------------|-----------------|---------------|--------------|------------------|-----------------|---------------|-----------|
| 1      | 6.623                 | 0.042           | 1.064         | 197096       | 8.32             | 1.13            | 0.036         |           |
| 2      | 7.180                 | 0.040           | 0.000         | 150208       | 7.92             | n.a.            | 0.035         |           |
| 3      | 7.800                 | 116.295         | 2130.592      | 142964       | 10.09            | 1.02            | 99.858        |           |
| 4      | 8.687                 | 0.039           | 0.646         | 138701       | 13.96            | 0.95            | 0.033         |           |
| 5      | 10.283                | 0.044           | 0.481         | 92117        | n.a.             | 1.03            | 0.038         |           |
| Total: |                       | 116.460         | 2132.784      |              | 40.28            |                 |               |           |

CAS NO. : 156001-51-3, CDCl<sub>3</sub>



<sup>1</sup>H NMR (400 MHz, Chloroform-d)  $\delta$  7.72 (d,  $J = 2.1$  Hz, 1H), 7.60 (dd,  $J = 8.3, 2.1$  Hz, 1H), 7.20 (d,  $J = 8.3$  Hz, 1H), 2.51 (s, 3H).

