



The Power to Question

# CERTIFICATE OF ANALYSIS

Catalog Number: sc-229749  
Lot Number: SAMPLE  
Product Name: 1-[3-(Trifluoromethyl)benzyl]piperazine  
CAS Number: 55513-16-1  
Molecular Formula:  $C_{12}H_{15}F_3N_2$   
Molecular Weight: 244.26

| Test                            | Specification                           | Result                   |
|---------------------------------|-----------------------------------------|--------------------------|
| Appearance                      | Clear colorless to yellow to pale brown | Clear pale yellow liquid |
| Identification ( $^{19}F$ -NMR) | Consistent with structure               | Complies                 |
| Purity                          |                                         | 97%                      |
| Purity ( $^1H$ -NMR)            | > 96.5%                                 | > 97.0%                  |
| Purity (GC)                     | > 96.5%                                 | 97.5%                    |
| Solution (Clarity)              | Clear colorless to yellow to brown      | Clear colorless          |
| Refractive Index                |                                         | 1.4899 at 20.7 °C        |
| Water Content (KF)              | < 1.5%                                  | 0.493%                   |

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.

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