

# Benzamide, n-decyl-n-methyl-2-trifluoromethyl-

**Inchi:** InChI=1S/C19H28F3NO/c1-3-4-5-6-7-8-9-12-15-23(2)18(24)16-13-10-11-14-17(16)19(20)  
**InchiKey:** ASZRFMWONOBQFH-UHFFFAOYSA-N  
**Formula:** C19H28F3NO  
**SMILES:** CCCCCCCCCCN(C)C(=O)c1ccccc1C(F)(F)F  
**Mol. weight [g/mol]:** 343.43

## Physical Properties

| Property code | Value   | Unit   | Source             |
|---------------|---------|--------|--------------------|
| hfus          | 45.06   | kJ/mol | Joback Method      |
| ie            | 9.14    | eV     | Cheméo Relay (1.0) |
| log10ws       | -5.69   |        | Cheméo Relay (1.0) |
| logp          | 5.918   |        | Crippen Method     |
| mcvol         | 271.670 | ml/mol | McGowan Method     |
| pc            | 1293.00 | kPa    | Joback Method      |
| rinpol        | 2151.00 |        | NIST Webbook       |
| tf            | 308.33  | K      | Cheméo Relay (1.0) |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 804.19 | J/mol×K | 726.67          | Joback Method |
| cpg           | 821.24 | J/mol×K | 756.86          | Joback Method |
| cpg           | 837.31 | J/mol×K | 787.06          | Joback Method |
| cpg           | 852.46 | J/mol×K | 817.25          | Joback Method |
| cpg           | 866.75 | J/mol×K | 847.44          | Joback Method |
| cpg           | 880.23 | J/mol×K | 877.64          | Joback Method |
| cpg           | 892.96 | J/mol×K | 907.83          | Joback Method |

## Sources

**McGowan Method:** <http://link.springer.com/article/10.1007/BF02311772>

|                                  |                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Crippen Method:</b>           | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                 |
| <b>Crippen Method:</b>           | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |
| <b>Cheméo Relay (1.0):</b>       |                                                                                                                                           |
| <b>Cheméo Relay (1.0, beta):</b> |                                                                                                                                           |
| <b>NIST Webbook:</b>             | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U308534&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U308534&amp;Units=SI</a> |
| <b>Joback Method:</b>            | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                     |

## Legend

|                 |                                           |
|-----------------|-------------------------------------------|
| <b>cpg:</b>     | Ideal gas heat capacity                   |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions |
| <b>ie:</b>      | Ionization energy                         |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l        |
| <b>logp:</b>    | Octanol/Water partition coefficient       |
| <b>mcvol:</b>   | McGowan's characteristic volume           |
| <b>pc:</b>      | Critical Pressure                         |
| <b>rinpol:</b>  | Non-polar retention indices               |
| <b>tf:</b>      | Normal melting (fusion) point             |

Latest version available from:

<https://www.chemeo.com/cid/65-686-9/Benzamide-n-decyl-n-methyl-2-trifluoromethyl.pdf>

Generated by Cheméo on 2026-07-22 00:48:49.2458697 +0000 UTC m=+192425.087755126.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.