

# [Chlorpromazine hydrochloride c17h20cl2n2s structure](https://assignbuster.com/chlorpromazine-hydrochloride-c17h20cl2n2s-structure/)

Contents

* Bio Activity:

|  |  |
| --- | --- |
| Molecular Formula | C 17 H 20 Cl 2 N 2 S |
| Average mass | 355. 325 Da |
| Density |  |
| Boiling Point |  |
| Flash Point |  |
| Molar Refractivity |  |
| Polarizability |  |
| Surface Tension |  |
| Molar Volume |  |

* Experimental data
* Predicted – ACD/Labs
* Predicted – ChemAxon
* Predicted – Mcule
* Experimental Physico-chemical Properties

## Experimental Melting Point:

|  |
| --- |
| 197 °CTCIC2481 |
| 193 °C (Decomposes)Oxford University Chemical Safety Data (No longer updated)More details |
| 179 °C (Decomposes)LKT Labs[C2947] |
| 195 °CBiosynthQ-200843 |
| 196-198 °CLabNetworkLN00159540 |

## Experimental Flash Point:

|  |
| --- |
| 226 °CBiosynthQ-200843 |

## Experimental Gravity:

|  |
| --- |
| 226 g/mLBiosynthQ-200843 |

## Experimental Solubility:

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| --- |
| DMSO 72 mg/mL; Water 70 mg/mLMedChem Expresshttp://www. medchemexpress. com/clindamycin-hydrochloride. html, HY-B0407A |
| DMSO: 25 mg/ml ; ethanol: 10 mg/ml; water:< 0. 1 mg/ml; chloroformMedChem ExpressHY-B0407A |
| Soluble in methanol, ethanol, chloroform or water. Insoluble in ether, or benzene. LKT Labs[C2947] |

* Predicted Physico-chemical Properties

## Predicted Melting Point:

|  |
| --- |
| 197 °CTCI |
| 197 °CTCIC2481 |

* Miscellaneous

## Appearance:

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| creamy white crystalline powderOxford University Chemical Safety Data (No longer updated)More details |

## Stability:

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| --- |
| Stable. Combustible. Incompatible with strong oxidizing agents. Air and light sesnsitive. Oxford University Chemical Safety Data (No longer updated)More details |

## Toxicity:

|  |
| --- |
| IPR-RAT LD50 62 mg kg-1, SCU-RAT LD50 140 mg kg-1, IVN-RAT LD50 25 mg kg-1, ORL-RAT LD50 145 mg kg-1, IVN-RBT LD50 5 mg kg-1Oxford University Chemical Safety Data (No longer updated)More details |

## Safety:

|  |
| --- |
| 25-26LKT Labs[C2947] |
| DangerBiosynthQ-200843 |
| GHS06BiosynthQ-200843 |
| H301 H330LKT Labs[C2947] |
| H301; H330BiosynthQ-200843 |
| IRRITANTMatrix Scientific058317 |
| P260; P284; P301+P310; P310BiosynthQ-200843 |
| Safety glasses, good ventilation. Gloves. Oxford University Chemical Safety Data (No longer updated)More details |
| T+Abblis ChemicalsAB1009377 |
| T+LKT Labs[C2947] |
| UN 2811 6. 1/PG 1LKT Labs[C2947] |

## Target Organs:

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| --- |
| Histamine Receptor antagonist; Potassium Channel inhibitor; Dopamine Receptor antagonist; Adrenergic Receptor antagonist; AChR antagonist; 5-HT receptor antagonistTargetMolT1384 |

## Bio Activity:

|  |
| --- |
| Calcium Channel Dopamine ReceptorMedChem ExpressHY-B0407A |
| Chlorpromazine Hydrochloride is a dopamine and potassium channel inhibitor used as the prototypical phenothiazine antipsychotic drug. MedChem Expresshttp://www. medchemexpress. com/clindamycin-hydrochloride. html, HY-B0407A |
| Chlorpromazine Hydrochloride is a dopamine and potassium channel inhibitor used as the prototypical phenothiazine antipsychotic drug. ; Target: Potassium Channel; Dopamine ReceptorChlorpromazine is a dopamine antagonist of the typical antipsychotic class of medications possessing additional antiadrenergic, antiserotonergic, anticholinergic and antihistaminergic properties used to treat schizophrenia. Chlorpromazine works on a variety of receptors in the central nervous system [1, 2]. MedChem ExpressHY-B0407A |
| Dopamine ReceptorMedChem ExpressHY-B0407A |
| GPCR/G proteinMedChem ExpressHY-B0407A |
| GPCR/G protein; Membrane Tranporter/Ion Channel; Neuronal Signaling; MedChem ExpressHY-B0407A |
| Histamine H1 receptor; Potassium Channel ; Dopamine receptor; Adrenergic receptor; Muscarinic AChR; 5-HT receptorTargetMolT1384 |
| NeuroscienceTargetMolT1384 |

Predicted data is generated using the ACD/Labs Percepta Platform – PhysChem Module

No predicted properties have been calculated for this compound.

|  |  |
| --- | --- |
| Density: |  |
| Boiling Point: |  |
| Vapour Pressure: |  |
| Enthalpy of Vaporization: |  |
| Flash Point: |  |
| Index of Refraction: |  |
| Molar Refractivity: |  |
| #H bond acceptors: |  |
| #H bond donors: |  |
| #Freely Rotating Bonds: |  |
| #Rule of 5 Violations: |  |

|  |  |
| --- | --- |
| ACD/LogP: |  |
| ACD/LogD (pH 5. 5): |  |
| ACD/BCF (pH 5. 5): |  |
| ACD/KOC (pH 5. 5): |  |
| ACD/LogD (pH 7. 4): |  |
| ACD/BCF (pH 7. 4): |  |
| ACD/KOC (pH 7. 4): |  |
| Polar Surface Area: |  |
| Polarizability: |  |
| Surface Tension: |  |
| Molar Volume: |  |

Click to predict properties on the Chemicalize site

* 1-Click Docking
* 1-Click Scaffold Hop