

Guanidine Hydrochloride

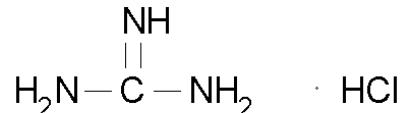
Product Description

Reference: UP018380

Chemical name: Guanidine Hydrochloride

Molecular Formula: CH₅N₃.HCl

CAS : 50-01-1



Molecular Weight : 95.53

Storage: Room temperature^(R)

[Directions for use](#)

[Scientific and technical information](#)

[Other information](#)

Specifications - Typical values

+

Test	Specification
Appearance:	White crystalline solid
Purity	min. 99.5%
Solubility (6M, Water)	Pass
Abs. 260nm (6M, Water)	max. 0.03
Abs. 230nm (6M, Water)	max. 0.22
Heavy metals:	<10ppm
Iron	max. 0.0005%
Lead	max. 0.0005%
Arsenic	max. 0.0005%
Ammonium chloride:	0.1%
Water content:	0.21%
Ash:	0.03%
max. 187°C	Melting Point min. 181°C,

Directions for use

Handling and Storage

Store at room temperature. Reach room temperature before opening, avoiding strong light and moisture. May agglomerate upon storage. The quality of the product does not appear to be affected and solutions prepared from the free-flowing and lumpy guanidine hydrochloride appear identical.

The maximum solubility of guanidine hydrochloride in water at room temperature is approximately 6M. To make an 8M solution in water, one must heat the solution to 35 °C for approximately 30 minutes.

FT-018380

Applications and Guidelines for use

Guanidine is a strong chaotropic agent useful for the denaturation and subsequent refolding of proteins. This denaturant can solubilize insoluble or denatured proteins such as inclusion bodies. This can be used as the first step in refolding proteins or enzymes into their active form. Urea and dithiothreitol (DTT) may also be necessary.

Guanidine hydrochloride is used popularly in RNA isolation to dissociate nucleoproteins and inhibit RNase.

Regulatory information

● Hazard mentions (European directives (EC) No 1272/2008 (and as amended))

Hazard Word & Code:



(SGH07)

Toxic, Irritating, sensibilizing, narcotic

Toxique, irritant, sensibilisant, narcotique

*Classification according to Regulation (EC) n°1272/2008

Acute toxicity, Oral (Category4), H302

Acute toxicity, Inhalation (Category4), H332

Skin irritation (Category2), H315

Eye irritation (Category2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16

*Signal word: Warning

Hazard Statement(s) & code H:

H302+H332 Harmful if swallowed or if inhaled H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statement(s) & code P:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear eye protection/face protection.

P301+P312+P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention

● Hazard mentions (Directive 1999/45/EC or 98/24/EC (and as amended))

Hazard Code: Xn

Nocif en cas d'ingestion

Risk Statement (code R):

R22-R36/37/38

Safety & Prudence Statement (code S):

S36/37/39

● Disclaimer

Materials from Uptima are sold **for research use only**, and are not intended for food, drug, household, or cosmetic uses. Uptima is not liable for any damage resulting from handling or contact with this product.

● **Transport: UN : none**

FT-018380

Related / associated products and documents

FT-[036291](#) EDTA and EGTA chelating agents

PH-[BC001a](#) Biochemicals

See [Product highlights](#), [catalogue](#)

See [Biosciences Innovation](#) and [e-search tool](#).

Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.
Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : Uptima / Interchim; Hotline : +33(0)4 70 03 73 06

Rev.T08E-S0E