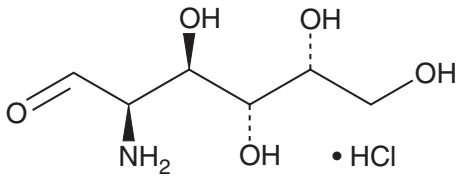
PRODUCT INFORMATION

D-Galactosamine (hydrochloride)

Item No. 22981

CAS Registry No.:	1772-03-8
Formal Name:	2-amino-2-deoxy-D-galactose, monohydrochloride
Synonym:	D-(+)-Galactosamine
MF:	$C_6H_{13}NO_5 \bullet HCl$
FW:	215.6
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

D-Galactosamine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the D-galactosamine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. D-Galactosamine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of D-galactosamine (hydrochloride) in ethanol is approximately 5 mg/ml and approximately 25 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of D-galactosamine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of D-galactosamine (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

D-Galactosamine is an amino sugar derivative of D-galactose (Item No. 20890). D-Galactosamine is hepatotoxic and is used, alone or in combination with LPS, as a model of liver failure in rodents.[1-3]

References

1. Keppler, D., Lesch, R., Reutter, W., *et al.* Experimental hepatitis induced by D-galactosamine. *Exp. Mol. Pathol* **9(2)**, 279-290 (1968).
2. Maes, M., Vinken, M., and Jaeschke, H. Experimental models of hepatotoxicity related to acute liver failure. *Toxicol. Appl. Pharmacol.* **290,** (2016).
3. Wang, W., Sun, L., Deng, Y., *et al.* Synergistic effects of antibodies against high-mobility group box 1 and tumor necrosis factor-α antibodies on D-(+)-galactosamine hydrochloride/lipopolysaccharide-induced acute liver failure. *FEBS J.* **280(6),** 1409-1419 (2013).

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