

## PRODUCT DATA SHEET

Code No.: BIA-D1202

Pack sizes: 25 mg, 100 mg

Synonyms : Adriamycin hydrochloride

## Specifications

CAS # : **25316-40-9**Molecular Formula : **C**<sub>27</sub>**H**<sub>30</sub>**CINO**<sub>11</sub>

Molecular Weight : 580.0

Source : Streptomyces peucetius

Appearance : Orange red solid
Purity : >99% by HPLC

Long Term Storage : -20°C

Solubility : Soluble ethanol, methanol, DMF or DMSO. Good water solubility.

## **Application Notes**

Doxorubicin hydrochloride (adriamycin hydrochloride) is an antitumor agent that has been formulated as a salt to achieve higher water solubility. While the salt shares the same pharmacological properties as doxorubicin free base, its greater water solubility may offer advantages in some in vitro applications. Physicochemical properties and chromatographic behaviour will depend on whether the pH is buffered. In non-pH controlled systems the free base and salt may behave differently.

## References

- 1. Adriamycin (14-hydroxydaunomycin), a novel antitumor antibiotic. Arcamone F. et al., Tet. Letters 1969, 13, 1007
- 2. Interference by doxorubicin with DNA unwinding in MCF-7 breast tumor cells. Fornari F.L. et al. , Mol. Pharmacology 1994, 45, 649.
- 3. Effect of Adriamycin on DNA, RNA, and protein synthesis in cell-free systems and intact cells. Momarier R. et al., Cancer Research 1976, 36, 2891.

Updated: 2 December 2014