

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name : Daunorubicin hydrochloride  
Product code : GA7448  
CAS number : 23541-50-6  
EINECS : 245-723-4

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

PC21: Laboratory chemicals.

#### 1.3 Details of the supplier of the safety data sheet

Company name	: Glentham Life Sciences Ltd	Telephone	: +44 (0) 1225 667 798
	Unit 5 Ingoldmells Court	Fax	: +44 (0) 2033 978 909
	Edinburgh Way	Email	: info@glentham.com
	Corsham	Web	: www.glentham.com
	Wiltshire, SN13 9XN		

#### 1.4 Emergency telephone number

Emergency telephone number: +44 (0) 1225 667 798 (09.00 - 17.00 GMT)

#### 1.5 REACH

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

---

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification under CLP

Acute Oral Tox. 3, Resp. Sens. 1, Carc. 2.

#### 2.2 Label elements

##### Label elements under CLP

##### Pictograms



##### Signal words

Danger

##### Hazard statements

H301

Toxic if swallowed.

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351

Suspected of causing cancer.

##### Precautionary statements

P261

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

P281

Use personal protective equipment as required.

P301 + P310

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P308 + P313

IF exposed or concerned: Get medical advice/attention.

P342 + P311

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

#### 2.3 Other hazards

##### PBT

This substance is not identified as a PBT substance.

---

### 3.0 Composition/information on ingredients

#### 3.1 Substances

Product name	: Daunorubicin hydrochloride	MW:	563.98
CAS number	: 23541-50-6	MF :	C27H29NO10 · HCl
EINECS	: 245-723-4		

---

### 4.0 First aid measures

#### 4.1 Description of first aid measures

##### Skin contact

Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor. Transfer to hospital if there are burns or symptoms of poisoning.

**Eye contact**

Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination. Consult a doctor.

**Ingestion**

Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. If unconscious and breathing is OK, place in the recovery position. Consult a doctor. Transfer to hospital as soon as possible.

**Inhalation**

Consult a doctor. Remove casualty from exposure ensuring one's own safety whilst doing so. Transfer to hospital as soon as possible.

**4.2 Most important symptoms and effects, both acute and delayed****Skin contact**

There may be mild irritation at the site of contact. There may be irritation and redness at the site of contact.

**Eye contact**

There may be irritation and redness. There may be pain and redness.

**Ingestion**

There may be soreness and redness of the mouth and throat. Severe poisoning can cause unconsciousness and severe and persistent nausea and vomiting. Severe poisoning can cause shock, unconsciousness and convulsions. Severe poisoning can cause vision to be blurred or blindness, severe headache and rapid gasping breathing. There may be irritation of the throat.

**Inhalation**

There may be irritation of the throat with a feeling of tightness in the chest. There may be shortness of breath with a burning sensation in the throat. Drowsiness or mental confusion may occur. Absorption through the lungs can occur causing symptoms similar to those of ingestion. Nausea and stomach pain may occur.

**Delayed / immediate effects**

Immediate effects can be expected after short-term exposure. Delayed effects can be expected after long-term exposure.

**4.3 Indication of any immediate medical attention and special treatment needed****Immediate / special treatment**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. Not applicable.

---

**5.0 Fire-fighting measures****5.1 Extinguishing media**

Use water spray to cool containers. Suitable extinguishing media for the surrounding fire should be used.

**5.2 Special hazards arising from the substance or mixture****Exposure hazards**

Toxic. In combustion emits toxic fumes.

**5.3 Advice for fire-fighters**

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

---

**6.0 Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

Refer to section 8 of SDS for personal protection details. Notify the police and fire brigade immediately. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Do not create dust. Evacuate the area immediately.

**6.2 Environmental precautions**

Do not discharge into drains or rivers. Alert the neighbourhood to the presence of fumes or gas.

**6.3 Methods and material for containment and cleaning up****Clean-up procedures**

Transfer to a closable, labelled salvage container for disposal by an appropriate method. Clean-up should be dealt with only by qualified personnel familiar with the specific substance.

**6.3 Reference to other sections**

Refer to section 8 of SDS.

---

**7.0 Handling and storage****7.1 Precautions for safe handling****Handling requirements**

Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Avoid direct contact with the substance.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Store in cool, well ventilated area. Keep container tightly closed. Avoid contact with water or humidity.

### 7.3 Specific end use(s)

No data available.

---

## 8.0 Exposure controls/personal protection

### 8.1 Control parameters

#### Workplace exposure limits

Not applicable.

### 8.2 Exposure controls

#### Engineering measures

Ensure there is sufficient ventilation of the area. Ensure there is exhaust ventilation of the area.

#### Respiratory protection

Respiratory protective device with particle filter. Self-contained breathing apparatus must be available in case of emergency.

#### Hand protection

Protective gloves.

#### Eye protection

Safety glasses. Safety glasses with side-shields. Ensure eye bath is to hand.

#### Skin protection

Protective clothing.

---

## 9.0 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical Form: Crystalline powder

Colour: Red

### 9.2 Other information

Not applicable.

---

## 10.0 Stability and reactivity

### 10.1 Reactivity

Stable under recommended transport or storage conditions.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

#### Hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

### 10.4 Conditions to avoid

Heat. Hot surfaces. Flames.

### 10.5 Incompatible materials

#### Materials to avoid

Strong acids. Strong oxidising agents.

---

## 11.0 Toxicological information

### 11.1 Information on toxicological effects

#### Toxicity values

Not applicable.

### 11.2 Information on toxicological effects

#### Skin contact

There may be mild irritation at the site of contact. There may be irritation and redness at the site of contact.

#### Eye contact

There may be irritation and redness. There may be pain and redness.

**Ingestion**

There may be soreness and redness of the mouth and throat. Severe poisoning can cause unconsciousness and severe and persistent nausea and vomiting. Severe poisoning can cause shock, unconsciousness and convulsions. Severe poisoning can cause vision to be blurred or blindness, severe headache and rapid gasping breathing. There may be irritation of the throat.

**Inhalation**

There may be irritation of the throat with a feeling of tightness in the chest. There may be shortness of breath with a burning sensation in the throat. Drowsiness or mental confusion may occur. Absorption through the lungs can occur causing symptoms similar to those of ingestion. Nausea and stomach pain may occur.

**Delayed / immediate effects**

Immediate effects can be expected after short-term exposure. Delayed effects can be expected after long-term exposure.

**Other information**

---

### 12.0 Ecological information

**12.1 Toxicity**

Not applicable.

**12.2 Persistence and degradability**

Biodegradable.

**12.3 Bioaccumulative potential**

No bioaccumulation potential.

**12.4 Mobility in soil**

Readily absorbed into soil.

**12.5 Results of PBT and vPvB assessment**

This substance is not identified as a PBT substance.

**12.6 Other adverse effects**

Negligible ecotoxicity.

---

### 13.0 Disposal considerations

**13.1 Waste treatment methods****Disposal operations**

Transfer to a suitable container and arrange for collection by specialised disposal company.

**NB**

The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

---

### 14.0 Transport information

**14.1 UN number**

UN2811

**14.2 UN proper shipping name**

Toxic solid, organic, n.o.s. (Daunorubicin hydrochloride)

**14.3 Transport hazard class(es)**

6.1

**14.4 Packing group**

III

**14.5 Environmental hazards**

N/A

**14.6 Special precautions for user**

No special precautions.

---

### 15.0 Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Not applicable.

**Chemical Safety Assessment**

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

---

**16.0 Other information**

**Other information**

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

**Legal disclaimer**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.