

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

#### 1.1 Product identifier

Product name : S-(-)-Nicotine  
Product code : GK9991  
CAS number : 54-11-5  
EINECS : 200-193-3

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

Manufacture of substances and mixtures. Industrial use - formulation into mixture.

#### 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.

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### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification under CLP

Acute Oral Tox. 3, Acute Derm. Tox. 1, Aquatic Chronic 2.

#### 2.2 Label elements

##### Label elements under CLP

##### Pictograms



##### Signal words

Danger

##### Hazard statements

H301 Toxic if swallowed.  
H310 Fatal in contact with skin.  
H411 Toxic to aquatic life with long lasting effects.

##### Precautionary statements

P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.

#### 2.3 Other hazards

##### PBT

This substance is not identified as a PBT substance.

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### 3.0 Composition/information on ingredients

#### 3.1 Substances

Product name	: S-(-)-Nicotine	MW:	162.24
CAS number	: 54-11-5	MF :	C10H14N2
EINECS	: 200-193-3		

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### 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. 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.

**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. Transfer to hospital as soon as possible.

**Inhalation**

Consult a doctor. Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. 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 redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal.

**Eye contact**

There may be irritation and redness. There may be severe pain. The eyes may water profusely.

**Ingestion**

There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness. 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. There may be loss of consciousness. Convulsions may occur. Absorption through the lungs can occur causing symptoms similar to those of ingestion.

**Delayed / immediate effects**

Immediate effects can be expected after short-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.

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**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.

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**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. Turn leaking containers leak-side up to prevent the escape of liquid.

**6.2 Environmental precautions**

Do not discharge into drains or rivers. Contain the spillage using bunding.

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

Absorb into dry earth or sand. 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.

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

Ensure there is exhaust ventilation of the area. 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

State	8 hour TWA	15 min. STEL	Respirable dust:	8 hour TWA	15 min. STEL
GB	0.5 mg/m3 (skin)	-		-	-
FR	0.5 mg/m3 (peau)	-		-	-
DE	0.5 mg/m3 (AGW - EF2 Haut)	-		-	-

### 8.2 Exposure controls

#### Engineering measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, control measures such as isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control the material at source.

#### Respiratory protection

Where the applicable risk assessment shows air purifying respirators are necessary, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as CEN (EU).

#### Hand protection

Protective gloves. Glove material: Nitrile rubber, Neoprene, Natural rubber or PVC. Breakthrough time: ≤ 108 minutes. Glove thickness: ≥ 0.12mm. EU standard: EN 374. Inspect gloves before use. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eye protection

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

#### Skin protection

Long sleeved clothing or complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the substance at the specific workplace.

#### Environmental

The floor of the storage room must be impermeable to prevent the escape of liquids. Prevent from entering in public sewers or the immediate environment.

## 9.0 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical Form:	Liquid	
Colour:	Colourless	
Melting Point:	-79.0	[°C]
Boiling Point:	247.0	[°C]
Relative Density:	1.01	[g/ml]

### 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.

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## 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 redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal.

#### Eye contact

There may be irritation and redness. There may be severe pain. The eyes may water profusely.

#### Ingestion

There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness. 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. There may be loss of consciousness. Convulsions may occur. Absorption through the lungs can occur causing symptoms similar to those of ingestion.

#### Delayed / immediate effects

Immediate effects can be expected after short-term exposure.

#### Other information

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## 12.0 Ecological information

### 12.1 Toxicity

Not applicable.

### 12.2 Persistence and degradability

Not biodegradable. Biodegradable.

### 12.3 Bioaccumulative potential

No bioaccumulation potential. 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. Toxic to aquatic organisms.

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## 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.

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**14.0 Transport information**

**14.1 UN number**

UN1654

**14.2 UN proper shipping name**

Nicotine

**14.3 Transport hazard class(es)**

6.1

**14.4 Packing group**

II

**14.5 Environmental hazards**

N/A

**14.6 Special precautions for user**

No special precautions.

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**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.

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**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.