# **Furazolidone**



# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

#### Trade name

Furazolidone

#### CAS number

67-45-8

#### EC number

200-653-3

#### **Synonyms**

3-{[(5-nitro-2-furyl)methylene]amino}-1,3-oxazolidin-2-one

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

#### Relevant identified uses

Research and development.

#### Not suitable for use in

Not suitable for human consumption or veterinary purposes.

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

# Supplier

Molekula Group

Street address

Molekula Ltd, Lingfield Way, Darlington,

**DL1 4XX Darlington** 

United Kingdom

# Telephone

+44 (0) 3302 000 333

#### Email

info@molekula.com

Web site

www.molekula.com

# Contact person

Kevin Banks

#### Email address

+44 (0) 7769276927

#### 1.4. Emergency telephone number

# Poison center/Additional emergency number

0344 892 0111 - National Poisons Information Service (Newcastle Centre)

# **Furazolidone**



#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

#### Classification

Reproductive toxicity, hazard category 2

#### **Hazard statements**

H361

#### 2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

# **Hazard pictograms**



#### Signal word

Warning

#### **Hazard statements**

H361 Suspected of damaging fertility or the unborn child.

#### **Precautionary statements**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

# 2.3. Other hazards

No data available

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Furazolidone	67-45-8 200-653-3 -	100%	Repr. 2	H361fd - -	-

# Molecular weight

225.16

# **Furazolidone**



#### Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel.

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. In case of persistent throat irritation or coughing: Seek medical attention and bring these instructions.

#### Skin contact

IF ON SKIN: Wash with plenty of water. Continue to rinse for at least 15 minutes and seek medical attention. Get medical advice/attention if you feel unwell.

#### Eye contact

Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.

#### **Ingestion**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

#### **Information for doctors**

First aiders/ medical personnel need to protect themselves.

#### 4.2. Most important symptoms and effects, both acute and delayed

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

#### Inhalation

Single exposure may cause the following adverse effects: Upper respiratory irritation. Difficulty in breathing.

#### Skin contact

Single exposure may cause the following adverse effects: Severe skin irritation.

#### Eye contact

Single exposure may cause the following adverse effects: Severe irritation.

#### Ingestion

Single exposure may cause the following adverse effects: Severe abdominal pain. Nausea, vomiting.

# 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No special treatment requirement.

# **Furazolidone**



# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

# Suitable extinguishing media

In case of fire: Use foam, carbon dioxide or dry powder to extinguish.

#### Unsuitable extinguishing media

No specific fire fighting procedure given.

# 5.2. Special hazards arising from the substance or mixture

Specific hazards: None. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Carbon dioxide (CO2). Carbon monoxide (CO). Nitrous gases (NOx). Combustible.

#### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

Evacuate area. Avoid breathing gas, fume, vapours or spray. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

#### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of dust and contact with skin and eyes. For personal protection, see section 8.

#### 6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

#### 6.3. Methods and material for containment and cleaning up

Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

#### 6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

#### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### **Preventive handling precautions**

For precautions see section 2.2.

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

Store in a dry place. Store in a closed container. Store in closed original container at temperatures between 8°C and 21°C. 35.6-46.4°F

### 7.3. Specific end use(s)

No specific usage precautions noted.

# **Furazolidone**



# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

# **Exposure limits**

No occupational exposure limit assigned.

#### 8.2. Exposure controls

# Eye / face protection

Wear eye protection.

#### Hand protection

Wear protective gloves. Nitrile gloves are recommended. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash contaminated skin thoroughly after handling.

#### Other skin protection

Wash skin thoroughly after handling.

#### Respiratory protection

Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided.

#### Environmental exposure controls

Avoid discharge into drains.

# **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

#### Physical state

Solid

#### **Colour**

Colourless.

#### **Odour**

No data available

#### Melting point / freezing point

254-256

# Boiling point or initial boiling point and boiling range

No data available

# **Flammability**

No data available

#### Lower and upper explosion limit

No data available

#### Flash point

No data available

# **Furazolidone**



#### **Auto-ignition temperature**

No data available

### Decomposition temperature

No data available

#### <u>pH</u>

No data available

#### Kinematic viscosity

No data available

# **Solubility**

0.04 g/l at 25 °C

#### Partition coefficient n-octanol/water

Bioaccumulation: Is not expected to be bioaccumulable.

#### Vapour pressure

No data available

# Density and/or relative density

No data available

#### Relative vapour density

No data available

# Particle characteristics

No data available

### 9.2. Other information

No data available

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

There are no known reactivity hazards associated with this product.

#### 10.2. Chemical stability

Stable under the prescribed storage conditions.

# 10.3. Possibility of hazardous reactions

No data available

#### 10.4. Conditions to avoid

Light sensitive.

# 10.5. Incompatible materials

Strong oxidising agents.

#### 10.6. Hazardous decomposition products

See section 5.

# **Furazolidone**



# **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Test animals	Remarks
Furazolidone 67-45-8 / 200-653-3	Acute Toxicity (Oral LD50):	2336 mg/kg	Rat	RTECS

# Carcinogenicity

Based on available data, the classification criteria are not met.

# Reproductive toxicity

Product / Substance name CAS / EC no.	Other
Furazolidone 67-45-8 / 200-653-3	Suspected of damaging fertility or the unborn child.

# STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### 11.2. Information on other hazards

No data available

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Acute fish toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
Furazolidone 67-45-8 / 200-653-3	LC50	25 mg/l	96 hours	Poecilia reticulata (Guppy)

# Acute algae toxicity

# **Furazolidone**



Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
Furazolidone 67-45-8 / 200-653-3	ErC50	1.3 mg/l	48 hours	Chlorella pyrenoidosa

# 12.2. Persistence and degradability

No data available

# 12.3. Bioaccumulative potential

No data available

# 12.4. Mobility in soil

No data available

#### 12.5. Results of PBT and vPvB assessment

No data available

# 12.6. Endocrine disrupting properties

No data available

#### 12.7. Other adverse effects

No data available

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

#### **Disposal considerations**

Dispose of contents/container in accordance with international regulations.

# **SECTION 14: Transport information**

# 14.1. UN number

Not applicable

#### 14.2. UN proper shipping name

Not applicable

# 14.3. Transport hazard class(es)

Not applicable

# 14.4. Packing group

Not applicable

#### 14.5. Environmental hazards

Not applicable

# 14.6. Special precautions for user

Not applicable

# **Furazolidone**



# 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

# **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU regulations</u>

This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only.

#### National regulations

No data available

#### Other regulations, limitations and legal regulations

Council Directive 92/85/EEC of 19 October 1992 on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding (tenth individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC).

#### 15.2. Chemical safety assessment

No data available

#### **SECTION 16: Other information**

#### Phrase meaning

Repr. 2 - Reproductive toxicity, hazard category 2

H361 Suspected of damaging fertility or the unborn child.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child