

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

# SAFETY DATA SHEET

Version: v1

Revision Date: 2025-09-14 Print Date: 2025-09-21

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

### 1.1 Product identifiers

Product name : Furan
Product Number : F116393
Brand : aladdin
CAS-No. : 110-00-9

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

Identified uses : Laboratory chemicals, Manufacture of substances.

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

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd

Address : 36 Xinjinqiao Road, Shanghai

Telephone : 400-620-6333
Fax : no data available

### 1.4 Emergency telephone number

Emergency Phone : 0532-83889090

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

#### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 1), H224

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Skin irritation (Category 2), H315

Germ cell mutagenicity (Category 2), H341

Carcinogenicity (Category 1B), H350

Specific target organ toxicity - repeated exposure (Category 2), H373

Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.



No. 809, Chuhua Branch Road, Fengxian District, Shanghai

# 2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H224 Extremely flammable liquid and vapor

H315 Causes skin irritation

H341 Suspected of causing genetic defects

H351 Suspected of causing cancer

H373 Causes damage to organs through prolonged or repeated exposure

H412 Harmful to aquatic life with long lasting effects

H302+H332 Harmful if swallowed or if inhaled

Precautionary statement(s)

P210 Keep away from heat, hot surface, sparks, open flames and other ignition sources. -

No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting/.../] equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash hands [and ...] thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

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

P281 Use personal protective equipment as required.

P321 Specific treatment (see ... on this label).

P330 Rinse mouth.

P302+P352 IF ON SKIN: wash with plenty of water.

P303+P361+P353 IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN

with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P370+P378 In case of fire: Use ... to extinguish.

P405 Store locked up.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to an approved waste disposal plant.

P203 Obtain, read and follow all safety instructions before use.

P301+P317 IF SWALLOWED: Get medical help.



No. 809, Chuhua Branch Road, Fengxian District, Shanghai

P318 if exposed or concerned, get medical advice.

P317 Get emergency medical help.

P332+P317 If skin irritation occurs: Get medical help.
P319 Get medical help if you feel unwell.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

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

### 3.1 Substances

Synonyms : Oxol; Divinylene Oxide

Formula : C4H4O

Molecular weight : 68.07

CAS No. : 110-00-9

EC-NO. : 203-727-3

Component	Classification	Concentration
Furan		
	Flam. Liq. 1; Acute Tox. 4; Skin Irrit. 2; Muta. 2; Carc. 1B; STOT RE 2;	CP, ≥98%,
	Aquatic Chronic 3; H224, H302, H332, H315, H341, H350, H373, H412	stabilized with
		0.025% BHT

### **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

#### General advice

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available



No. 809, Chuhua Branch Road, Fengxian District, Shanghai

### **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2) Foam Dry powder

Unsuitable extinguishing media

no data available

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides Combustible. Pay attention to flashback. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.

### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### 5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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

# 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Dispose of properly. Clean up affected area.

# 6.4 Reference to other sections

For disposal see section 13.

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

### 7.1 Precautions for safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For



No. 809, Chuhua Branch Road, Fengxian District, Shanghai

precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Protected from light. Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons. 2-8 °C.

### 7.3 Specific end use(s)

no data available

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

# 8.1 Control parameters

Component	CAS No.	Value	Control parameters	Basis
	NO.		parameters	
Furan	110-	PC-	0.5 mg/m3	Occupational
	00-9	TWA		exposure
				limits for
				hazardous
				factors in the
				workplace -
				chemical
				hazardous
				factors
	Note	G2B - suspected human carcinogen		

# 8.2 Exposure controls

### Appropriate engineering controls

Replace contaminated clothing immediately. Use skin protective lotion. Wash hands and wash your face after using this substance.

#### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. 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.

#### **Body Protection**

Flame retardant antistatic protective clothing.

#### Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following



No. 809, Chuhua Branch Road, Fengxian District, Shanghai

standards: DIN EN 143, DIN 14387 and other accompanying standards relating to

the used respiratory protection system. Recommended Filter type: Filter type AX

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

#### Control of environmental exposure

Do not let product enter drains. Risk of explosion.

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

# 9.1 Information on basic physical and chemical properties

a) Appearance form: liquid color: Colorless to Yellow

b) Odour no data available c) Odour Threshold no data available d) pH no data available

e) Melting point/freezing point -85.6°C f) Initial boiling point and boiling range 31.3°C g) Flash point -35 °C

h) Evaporation rate no data available i) Flammability (solid, gas) no data available

j) Upper/lower flammability or explosive

limits no data available k) Vapour pressure no data available l) Vapour density no data available m) Relative density 0.937-0.941

n) Water solubility Slightly soluble in water. Soluble in common organic solvents, including

alcohol, ether and acetone.

o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity no data available s) Explosive properties N no data available t) Oxidizing properties N no data available

### 9.2 Other safety information

no data available

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

no data available



No. 809, Chuhua Branch Road, Fengxian District, Shanghai

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature). Contains the following stabilizer(s): butyl hydroxytoluene (BHT) (0,032 %)

# 10.3 Possibility of hazardous reactions

Exothermic reaction with: Oxidizing agents acids Air

#### 10.4 Conditions to avoid

Warming. Moisture.

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

Peroxides In the event of fire: see section 5

### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

#### Acute toxicity

Acute toxicity estimate Oral - 500,26 mg/kg (Calculation method)

LD50 Oral - Rat - 200 - 2.000 mg/kg

Acute toxicity estimate Inhalation - 4 h - 11,1 mg/l (Calculation method)

LC50 Inhalation - Rat - 4h - 5,3 mg/I Remarks: (External MSDS) (Regulation (EC) No 1272/2008, Annex VI) Dermal: No data available

#### Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

#### Germ cell mutagenicity

Suspected of causing genetic defects. Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: positive Test Type: In vitro mammalian cell gene mutation test Test system: Mouse lymphoma test Metabolic activation: without metabolic activation Method: OECD Test Guideline 476 Result: positive Test Type: Chromosome aberration test Species: Mouse Cell type: Bone marrow Application Route: Intraperitoneal injection Method: OECD Test Guideline 474 Result: positive

#### Carcinogenicity

no data available



No. 809, Chuhua Branch Road, Fengxian District, Shanghai

#### Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### **Aspiration hazard**

no data available

#### **Additional Information**

Central nervous system depression, Prolonged or repeated exposure to skin causes defatting and dermatitis.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 61 mg/l - 96,0 h (OECD Test Guideline 203)

# 12.2 Persistence and degradability

Biodegradability anaerobic - Exposure time 28 d Result: 4 % - Not readily biodegradable. Remarks: (ECHA)

#### 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 Other adverse effects

Discharge into the environment must be avoided.

#### **SECTION 13:**

### 13.1 Disposal considerations

**Product** 

Dispose of the remaining and non recyclable solution to a licensed company.

Contaminated packaging

Dispose of as unused product.

### **SECTION 14: Transport information**



No. 809, Chuhua Branch Road, Fengxian District, Shanghai

DOT (US)

UN number: 2389 Packing group: I Class: 3

Proper shipping name: FURAN Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

available available

Environmental Hazards: no

**IMDG** 

UN number: 2389 Packing group: I EMS-No: no data available

Proper shipping name: FURAN

**IATA** 

UN number: 2389 Packing group: I Class: 3

Proper shipping name: FURAN

# **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

#### **Further information**

Copyright Aladdin Co. Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

Version: v1 Revision Date: 2025-09-14 Print Date: 2025-09-21