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

1.1 Product identifier

- **Product name:** 2,4-Diethyl-9H-thioxanthen-9-one
- **Product number:** 105216
- **CAS number:** 82799-44-8
- **EC number:** 280-041-0
- **Synonyms:** 2, 4-Diethylthioxanthen-9-one

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

- **Manufacturer/Supplier:** J&K Scientific Ltd.
  
  AEF 18/F Bldg-D, No. 6 BeiSiHuan-Zhong Rd, Beijing, China
  
  Telephone/Fax: +86 10 8284 8833 / +86 10 8284 9933
  
  E-mail address: jkinfo@jkchemical.com

- **Further information obtainable from:** Product safety department

1.4 Emergency telephone number:

- +86 10 8284 2121 (CN)
- +32 (0) 11 34 03 90 (EU)
- Deutschland: Giftninformationszentrum Nord
- +49 551 19240

### SECTION 2: Hazards identification

2.1 Classification according to Regulation (EC) No 1272/2008

- The substance is not classified, according to the CLP regulation.

2.2 Label elements

- **Labelling according to Regulation (EC) No 1272/2008:** Void
- **Hazard pictograms:** Void
- **Signal word:** Void
- **Hazard statements:** Void

2.3 Other hazards

- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Substances

- **CAS No. Description:** 2,4-Diethyl-9H-thioxanthen-9-one
- **Identification number(s):**
  - **EC number:** 280-041-0

### SECTION 4: First aid measures

4.1 Description of first aid measures

- **After inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
Product name: 2,4-Diethyl-9H-thioxanthen-9-one

After swallowing:
Do not induce vomiting; call for medical help immediately. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Information for doctor:
No further information available.

4.2 Most important symptoms and effects, both acute and delayed
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents:
Use fire extinguishing methods suitable to surrounding conditions.
Water spray
Alcohol-resistant foam
Dry chemical
Carbon dioxide

5.2 Special hazards arising from the substance or mixture
Carbon oxides
Sulphur oxides

5.3 Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective clothing.

6.2 Environmental precautions:
Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up:
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Dispose of the material collected according to regulations.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Handling:
Precautions for safe handling
No special precautions are necessary if used correctly.
Provide appropriate exhaust ventilation at places where dust is formed.
Product name: 2,4-Diethyl-9H-thioxanthen-9-one

For precautions see section 2.2

For precautions see section 2.2

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place
Keep in a cool place
Light sensitive
Heat sensitive

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Storage class: Non-combustible solids that cannot be assigned to any of the above storage classes

7.3 Specific end use(s)

A part from the uses mentioned in section 1.2, no other specific uses are stipulated
No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

Additional Occupational Exposure Limit Values for possible hazards during processing:

Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.

The lists valid during the making were used as basis.

Additional information:

8.2 Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Protection of hands:

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0,7 mm
Break through time: 480 min
Material tested: Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Fluorinated rubber
Minimum layer thickness: 0,7 mm
Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves.
Product name: 2,4-Diethyl-9H-thioxanthen-9-one

This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers.

Eye/face protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Limitation and supervision of exposure into the environment Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
Form: Solid
Colour: Dark yellow
Odour: Uncharacteristic.
Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition
Melting point/freezing point: 66-70 °C
Initial boiling point and boiling range: Undetermined.

Flash point: Not applicable.

Flammability (solid, gas): Product is not flammable.

Decomposition temperature: Not determined.

Auto-ignition temperature: Not determined.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:
Lower: Not determined.
Upper: Not determined.

Vapour pressure: Not applicable.

Density: Not determined.

Bulk density: Not determined.
Relative density: Not determined.

Vapour density Not applicable.

Evaporation rate: Not applicable.

Solubility in / Miscibility with water: Not determined.

Partition coefficient: n-octanol/water: Not determined.

Viscosity:
Dynamic: Not applicable.

Kinematic: Not applicable.

9.2 Other information No further relevant information available.
SECTION 10: Stability and reactivity

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability
Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products:
Other decomposition products - No data available
Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Primary irritant effect:
Skin corrosion/irritation
Based on available data, the classification criteria are not met.

Serious eye damage/irritation
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.

Subacute to chronic toxicity:
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity
Based on available data, the classification criteria are not met.

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

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

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.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
No further relevant information available.

12.2 Persistence and degradability
No further relevant information available.

12.3 Behaviour in environmental systems:
Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

Additional ecological information:
General notes:
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.

12.5 Results of PBT and vPvB assessment
PBT:
Not applicable.
Product name: 2,4-Diethyl-9H-thioxanthen-9-one

vPvB: Not applicable.
12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation: Smaller quantities can be disposed of with household waste.

13.2 Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA Not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA Not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA Not regulated

14.4 Packing group
ADR, IMDG, IATA Not regulated

14.5 Environmental hazards:
Marine pollutant: No

14.6 Special precautions for user Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

14.8 Transport/Additional information:
UN "Model Regulation": Not dangerous according to the above specifications.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Chinese Chemical Inventory of Existing Chemical Substances Substance is listed.

Directive 2012/18/EU Named dangerous substances - ANNEX I Substance is not listed.

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II Substance is not listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
Product name: 2,4-Diethyl-9H-thioxanthen-9-one

IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative