SAFETY DATA SHEETS

According to the UN GHS revision 9

SECTION 1: Identification

1.1 GHS Product identifier

Product name 1,2-Dihydro-2,2,4-trimethylquinoline, oligomers

1.2 Other means of identification

Product number /

Other names nocrac224;permanaxtq;polnoksr

1.3 Recommended use of the chemical and restrictions on use

Identified uses Industrial and scientific research use.

Uses advised against no data available

1.4 Supplier's details

Company Henan Kailun Chemical Co.,Ltd

Address Lijiang East Rd, Hua County, Henan Province, China

Telephone 0086-18567812865

E-mail jackyliu@kailunchem.com

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 3

2.2 GHS label elements, including precautionary statements

Pictogram(s) No symbol.

Signal word Warning

Hazard statement(s) H412 Harmful to aquatic life with long lasting effects

Precautionary

statement(s) P273 Avoid release to the environment.

Response none Storage none

Disposal P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with

applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards which do not result in classification

no data available

SECTION 3: Composition/information on ingredients

3.1 Substances

| Chemical name | Common names and synonyms | CAS number | EC number | Concentration |
|--|---|------------|-----------|---------------|
| 1,2-Dihydro-2,2,4- trimethylquinoline, oligomers | 1,2-Dihydro-2,2,4- trimethylquinoline, oligomers | 26780-96-1 | 500-051-3 | 100% |

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison

4.2 Most important symptoms/effects, acute and delayed

ACUTE/CHRONIC HAZARDS: When heated to decomposition this compound emits toxic fumes of nitrogen oxides. (NTP, 1992)

4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Fires involving this material can be controlled with a dry chemical, carbon dioxide or Halon extinguisher. (NTP, 1992)

5.2 Specific hazards arising from the chemical

This chemical is combustible. (NTP, 1992)

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be

6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

SECTION 9: Physical and chemical properties and safety characteristics

Physical stateSolid. Pastille.ColourOrange transparent.Odourno data available

Melting point/freezing

point 48 °C.

Boiling point or initial

boiling point and boiling Atm. press.:Ca. 1 013 hPa.

range

Flammability no data available

Lower and upper

explosion no data available

limit/flammahility/limit

Flash point 180 °C. Atm. press.:Ca. 1 013 hPa.

Auto-ignition no data available
Decomposition no data available
pH no data available
Kinematic viscosity no data available

Solubility less than 0.1 mg/mL at 66° F

(NTP, 1992)

Partition coefficient n- log Pow = >= 1.2 - <= 7.7. Temperature:25 °C. Remarks:Average: 5.8. (Average value calculated with area

% of all fractions and their correspondence logPow).

Vapour pressure< 0 Pa. Temperature:25 °C.</th>Density and/or relative1.04. Temperature:20 °C.

Relative vapour density no data available **Particle characteristics** no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

octanol/water

This chemical may be sensitive to prolonged exposure to air and light. (NTP, 1992). Insoluble in water.

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

SLIGHT1,2-DIHYDRO-2,2,4-TRIMETHYLQUINOLINE neutralizes acids in exothermic reactions to form salts plus water. May be incompatible with isocyanates, halogenated organics, peroxides, phenols (acidic), epoxides, anhydrides, and acid halides. Flammable gaseous hydrogen may be generated in combination with strong reducing agents, such as hydrides.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

Disaster hazard: see quinoline. dangerous; when heated to decomposition it emits toxic fumes of /nitrogen oxides/. quinoline

SECTION 11: Toxicological information

Acute toxicity

- · Oral: LD50 rat (male/female) 3 190 mg/kg bw.
- · Inhalation: no data available
- Dermal: LD50 rabbit (male/female) > 5 100 mg/kg bw.

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

SECTION 12: Ecological information

12.1 Toxicity

- Toxicity to fish: LLO Danio rerio (previous name: Brachydanio rerio) >= 100 mg/L 96 h.
- Toxicity to daphnia and other aquatic invertebrates: ELO Daphnia magna 6.3 mg/L 48 h.
- Toxicity to algae: ELO Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) >= 100 mg/L 72 h.
- Toxicity to microorganisms: EC50 activated sludge of a predominantly domestic sewage > 10 000 mg/L 3 h. Remarks:Respiration rate.

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 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

14.1 UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.5 Environmental hazards

ADR/RID: No IMDG: No

IATA: No

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to IMO instruments

no data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

| Chemical name | Common names and synonyms | CAS number | EC number |
|---|---|------------|-----------|
| 1,2-Dihydro-2,2,4- trimethylquinoline, | 1,2-Dihydro-2,2,4- trimethylquinoline, oligomers | 26780-96-1 | 500-051-3 |
| European Inventory of Exi | Not Listed. | | |
| EC Inventory | Listed. | | |
| United States Toxic Substa | Listed. | | |
| China Catalog of Hazardo | Not Listed. | | |
| New Zealand Inventory of | Listed. | | |
| Philippines Inventory of C | Listed. | | |
| Vietnam National Chemic | Listed. | | |
| Chinese Chemical Invento | Listed. | | |
| Korea Existing Chemicals | Listed. | | |

SECTION 16: Other information

Information on revision

Creation Date 15-Jul-19 Revision Date 15-Jul-19

Abbreviations and acronyms

- · CAS: Chemical Abstracts Service
- · ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

- · RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- · IMDG: International Maritime Dangerous Goods
- · IATA: International Air Transportation Association
- · TWA: Time Weighted
- · STEL: Short term
- · LC50: Lethal
- · LD50: Lethal Dose 50%
- · EC50: Effective

